# SITE SAFETY AND HEALTH PLAN Building Demolition and Site Remediation Mohasco Mills Complex City of Amsterdam, New York

Submitted by:

Bianchi Industrial Services, LLC 208 Longbranch Road Syracuse, New York

February 7, 2006

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52L

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# **Revision Summary**

Revision No.	Revision Date	Description of Changes	Reason for Change
Original	February 7, 2006	Original Site-Specific Health and Safety Plan	

### Preface

This document describes the anticipated protective measures necessary to ensure worker health and safety during the activities planned for this project. All employees and subcontractors associated with this project must read, understand and agree to follow the contents of this plan. If any activity or situation arises during the course of this project which is not covered in this plan, the employee or subcontractor responsible of that activity will inform the Bianchi Industrial Services, LLC Site Safety and Health Officer. An amendment covering the planed activity or situation will be added before completion of that activity.

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### Attachments

PRE-ENTRY BRIEFING / SAFETY COMPLIANCE SIGN OFF DAILY TOOL BOX SAFETY MEETING ENTRY / EXIT LOG AIR MONITORING LOG QUALITATIVE FIT TEST JHA FORM HOT WORK PERMIT ROUTE TO HOSPITAL

#### <u>APPENDICES</u>

Appendix 1 - Resumes Appendix 2 - Engineering Survey (to be inserted once complete) Appendix 3 – Asbestos Abatement Plan Appendix 4 – Demolition Work Plan Appendix 5 – Lead Compliance Plan

# 8. Introduction

# 8.1 Corporate Safety Policy

Bianchi Industrial Services, LLC believes there cannot be any compromise with the safety and health of our employees, visitors, subcontractors, and any other persons who may come under our supervision. The importance of employee Health and Safety is paramount to Bianchi Industrial Services, LLC. Bianchi Industrial Services, LLC's Health and Safety Program has been established to provide accountability as well as guidance for the implementation and affirmation of Bianchi Industrial Services, LLC Health and Safety program.

Bianchi Industrial Services, LLC believes that with effective implementation of our Corporate Health and Safety Program all accidents are preventable. Consequently, Bianchi Industrial Services, LLC subscribes to a "zero accident philosophy".

All Bianchi Industrial Services, LLC project managers, supervisors, employees and safety representatives have authority to stop work anytime he or she believes the safety and well being of our employees, subcontractors, visitors or off-site personnel is jeopardized.

### 8.2 Program Purpose

The purpose of this Site-Specific Health and Safety Plan is to provide guidelines and establish procedures for the protection of Bianchi Industrial Services, LLC personnel, subcontractors and visitors performing work at the Mohasco Mills Complex, Amsterdam, NY This Site-Specific Health and Safety Plan provides a description of the potential chemical and physical hazards that exist or may arise during the course of this project and the means for insuring the personnel do not incur injury or illness during the project.

Bianchi Industrial Services, LLC personnel and all subcontractors will comply with the applicable rules and regulations defined in the Site-Specific Health and Safety Plan. Any conflicts that exist between the Site-Specific Health and Safety Plan and the actual policies and procedures utilized should be brought to the attention of the Project Health and Safety Manager. This Site-Specific Health and Safety Plan applies to all Bianchi Industrial Services, LLC employees, subcontractors, and visitors.

Over the course of this project, it may be necessary to revise this plan in order to account for changing or unanticipated site conditions. Any revisions made to the Site-Specific Health and Safety Plan must be made in writing, approved by the Project Health and Safety Manager and Project Manager and noted in the Record of Revisions (Page 2) of this Site-Specific Health and Safety Plan.

### 8.3 Program Objective

The primary objective of this Site-Specific Health and Safety Plan is to ensure the well-being and safety of all employees, as measured by having ZERO recordable incidents, injuries or illnesses.

To assist in compliance with the objective, all project staff will acknowledge and adhere to the policies and procedures established in this Site-Specific Health and Safety Plan. Accordingly, all project personnel will read this Site-Specific Health and Safety Plan and sign the Plan Acceptance Form (Attachment 1) to certify they have read, understand and agree to abide by its provisions.

### 8.4 Site Description

The former Mohasco Mills Complex is located on 23.5 acres at the corner of Lyon Street and Forest Avenue in Amsterdam. The North Chuctanunda Creek bisects the site from the northeast to the southwest. An abandoned steam power plant is located on the property as are the remains of large buildings, foundations, demolition debris, and pavement. The property was used from the late 1880s through 1984 for carpet manufacturing, including the milling and weaving of raw materials, and dye operations. Most buildings at the site were destroyed by fire in 1992 and 1994. Debris from the buildings was left on-site and was used for backfilling building foundations.

Investigation and remedial activities were conducted previously at the Mohasco Mills Complex to determine the extent and nature of contamination at the site, and to remove and dispose of the electrical transformers, materials containing asbestos, coal and fly-ash, and soil contaminated with polychlorinated biphenyls (PCBs). A 100,000-gallon aboveground storage tank and 100 tons of petroleum-contaminated soil also were removed.

### 8.5 Summary of Work

Work to be completed under this Health and Safety Plan includes the following:

- Mobilization and Demobilization, including installation of temporary services.
- Completion of pre-demolition Engineering Survey of Buildings 36 and 20 A.
- Erection of the chain link fencing to prevent unauthorized entry, protect public, control traffic and access.
- Abatement of Asbestos Containing Materials (ACM) from Building 36 and 20A.
- Utilization of our Komatsu 450C High Reach track excavator equipped with a pulverizing attachment to dismantle Building 36 down to the 2<sup>nd</sup> level.
- Demolition the lower levels of Building 36, to concrete slab on-grade, with conventional track excavators equipped with pulverizing attachments from the 2<sup>nd</sup> level down.

- Demolition of Building 20A, to concrete slab on-grade, with conventional track excavators equipped with pulverizing attachments.
- Demolition of the remains of Buildings 7, 7A, 11, and 26. Foundation walls below grade to remain.
- Demolition of Powerhouse smoke stack.
- Cleaning of Building 31 foundation of all debris, soil and concrete.
- Removal of debris from creek bed.
- Removal and off-site disposal of drainage pipe and soil from the remains of Buildings 7, 7A, 11, and 26. (To be treated as Hazardous).
- Decommission groundwater monitoring wells.
- Site grading, installation of geo-textile, soil and seed.

### 8.6 References

This Site Safety and Health plan references the following documents.

- <u>Occupational Safety & Health Standards</u>, 29 CFR Parts 1910 & 1926, U.S. Department of Labor, Occupational Safety and Health Administration.
- <u>Corporate Health and Safety Manual</u>, Bianchi Industrial Services, LLC.
- <u>Project Specifications</u>, ENSR International, February 2005.
- Lead and Asbestos Surveys, ENSR International.

# 9. Safety and Health Organization / Responsibilities

# 9.1 Health and Safety Manager

The Project Health and Safety Manager is responsible for development the Site-Specific Health and Safety Plan. The Health and Safety Manager is a Certified Industrial Hygienist with experience in developing and implementing safety programs, exposure assessment and air monitoring programs, personal protective equipment and respiratory protection programs at hazardous waste sites.

The Project Health and Safety Manager for this project is Mr. Timothy M. O'Rourke, CIH. A copy of Mr. O'Rourke's Resume is included in Appendix 1.

Specific responsibilities of the Project Health and Safety Manager include:

• Development of the Site-Specific Health and Safety Plan,

• Being available for consultation to the Site Safety and Health Officer to provide technical assistance, as necessary.

### 9.2 Site Safety and Health Officer

The Site Safety and Health Officer (HSO) will be responsible for the implementation and enforcement of the Site-Specific Health and Safety Plan. The HSO has the authority to stop work any time unsafe work conditions are determined and keep a daily log of relevant health and safety information. The Site Safety Officer is certified in First Aid and CPR.

The HSO for this project will be Mr. Bruce Cooley. A copy of Mr. Cooley's Resume is included in Appendix 1. The alternate HSO for the project will be Mr. Terry Coleman.

Specific responsibilities of the Site Safety and Health Officer include:

- Day- to-day implementation, enforcement, and monitoring of the Site-Specific Health and Safety Plan,
- Coordinating any changes to the Site Specific Health & Safety Plan with the Safety and Health Coordinator, Site Superintendent and Engineer's Representative,
- Conducting pre-construction indoctrination of all on-site personnel with regard to contents of the Health and Safety Plan.
- Monitoring the compliance of field personnel to the routine and proper use of PPE prescribed for each task,
- Inspecting PPE to ensure that it is in good condition and that it is being stored and maintained properly,
- Stopping work if site conditions threaten the health and/or safety of site workers or the public,
- Maintaining the site control log,
- Maintaining a site safety log to record air monitoring results and other health and safety related information,
- Knowing emergency procedures, evacuation routes and telephone numbers of ambulance, local hospital, poison control center, fire and police departments,
- Ensuring all site personnel have received the required OSHA and site specific training required by the Site-Specific Health and Safety Plan,
- Ensuring all site workers have current medical surveillance records as required by the Site-Specific Health and Safety Plan,
- Implementing emergency response and contingency plans, if necessary.
- Performing periodic (daily) training of all on-site personnel with regard to the Site Specific Health and Safety Plan and other safety requirements,

- Completion of Job Hazard Analysis, as necessary.
- Performing required site and personal air monitoring.

### 9.3 Project Superintendent

The Project Superintendent will be the Bianchi Industrial Services, LLC employee responsible for overall project management and coordination of daily activities. The Project Superintendent oversees daily activities of the project and is, therefore, responsible for implementing health and safety requirements and following safety procedures in the field. The Project Superintendent for this project is Mr. Fred Kreller.

### 9.4 Project Employees

It is the responsibility of each employee to understand and abide by all applicable training, comply with all signage, advise appropriate personnel of deficiencies in the program and/or new hazards on site, and follow ALL Health and Safety rules at the facility and meet all the Health and Safety requirements of their contracts.

### 9.5 Summary of Safety and Health Personnel

Title	Name	Telephone
Project Manager	William Bianchi	315-453-0001
Project Superintendent	Fred Kreller	315-453-0001 315-575-1975
Site Safety and Health Officer	Bruce Cooley	607-687-7434 607- 972-7192 (cell)
Project Health and Safety Manager	Timothy O'Rourke, CIH	607-687-7434 607-427-4714 (cell)

Table 9-1 - Key Health and Safety Personnel

# **10.Health and Safety Compliance**

# 10.1 Job Site Inspections

A primary responsibility of the HSO is to conduct job site safety inspections. The HSO will continually evaluate job site conditions and work practices each day to identify unsafe conditions or acts. A safety self-inspection will be performed at least weekly. The results of these inspections are often used as the basis for Daily Job Safety Meetings. The HSO will maintain a logbook daily containing the results of inspections, corrective actions and other relevant H&S issues.

Bianchi Industrial Services, LLC supervisory personnel are responsible for communicating the requirements of this procedure to employees and subcontracted personnel. When an employee or subcontractor is observed violating a safety rule or regulation the following procedure will be implemented.

### 10.2 Discipline

### 10.2.1 Verbal Warning

Upon the first infraction of any safety rule, safety practice, special project safety rules, client safety rules, or other written regulation relating to employee, public, or environmental safety or health, a verbal warning will be given. Bianchi Industrial Services, LLC will be advised of the nature of the violation, the corrective action taken to ensure the operation is performed safely in the future. Verbal warnings should be documented in the Site Activity Log, Toolbox Safety Meeting, or equivalent.

Verbal warnings may be issued to an entire group and does not require that each individual was observed violating safety rule(s). Group warnings must be documented on a Toolbox Safety Meeting form or equivalent which is signed by all employees. The content of the Toolbox Meeting Topic must inform employees that the meeting is a "verbal warning under the disciplinary policy" and include the safety violation observed, the proper safe practices, and other necessary corrective actions.

### 10.2.2 First Written Warning

If a Bianchi Industrial Services, LLC employee or subcontractor employee is again observed violating the same rule for which a verbal warning was given, a written warning will then be issued to the individual employee. The written warning must be documented. A copy of the warning will be provided to the employee, employee's supervisor, and Mr. David Bianchi.

The first written warning will identify the safety rule broken and will note that a third warning (i.e., one (1) verbal and two (2) written warnings) for violation of the same safety rule will result in removal from the job site, termination of employment, or other disciplinary action as deemed appropriate by Bianchi Industrial Services, LLC. Unacceptable safety performance by

subcontractors may be grounds for termination of Bianchi Industrial Services, LLC contractual obligations.

### 10.2.3 Second Written Warning

Upon the second written violation being issued to the Bianchi Industrial Services, LLC / Environmental Safety & Control, LLC employee or subcontractor, individuals will be removed from the job site.

Temporary and permanent Bianchi Industrial Services, LLC employees will be removed from the job site by the Bianchi Industrial Services, LLC Site Supervisor or Foremen and NOT be permitted to work on that site for a period of 1 year. The Corporate Safety Manager will evaluate written violations and employment history and make a recommendation to the Owner/Owners regarding termination of employment. IF employment is NOT terminated, THEN other disciplinary actions must be specified and will include at least a two-week suspension without pay. A second instance involving a Second Written Safety Warning being issued within any three (3) year period will result in immediate termination of employment.

Termination papers for temporary and permanent employees will note that the termination was for violation of Health and Safety Regulations and that the employee is not eligible for rehire for one (1) year or may NOT work on another Bianchi Industrial Services, LLC project for one (1) year.

Permanent Bianchi Industrial Services, LLC employees may appeal termination in writing to the Owner/Owners of Bianchi Industrial Services, LLC within 30 days. Consideration of all appeals is at the discretion of Bianchi Industrial Services, LLC.

Subcontractor employees will be removed from the job site and may NOT work on another Bianchi Industrial Services, LLC job-site for one (1) year. The *name* and *employee number* for the subcontractor employee will be forwarded to the Corporate Safety Manager.

### 10.2.4 Violation of Major Safety Rules

If a Bianchi Industrial Services, LLC subcontractor or employee is guilty of violating a major safety rule, then that person may be terminated or removed from site immediately. Additionally, Bianchi Industrial Services, LLC will notify Mohasco Mills Complex as soon as possible (within 24 hours maximum) of all incidents and serious near misses. A root cause analysis and incident investigation will be performed after any incident or serious near miss. Violations of rules justifying immediate termination or removal from site include, but are NOT necessarily limited to, the following:

- Violation of lockout/Tagout procedures
- Lack of fall protection
- Violation of confined space entry procedures
- Violation of excavation safety procedures

- Violation of the Lead Compliance Program
- Welding/cutting on equipment or in areas that may contain flammable atmospheres without verifying that the atmosphere is safe.
- Unsafe crane/heavy equipment operation: persons riding in buckets, failure to identify and take precautions for utilities, etc.
- Any site-specific safety requirements for which violations could result in serious injury or death, significant equipment damage, or environmental contamination.
- Failure to report injuries which require medical treatment as defined by OSHA. All injuries (including subcontractors) must be reported immediately.
- Any other serious violation, as deemed by project supervisor or site safety officer

### 10.3 Documentation

Each verbal and written warning must be thoroughly documented. Failure to completely document warnings may adversely impair Bianchi Industrial Services, LLC's ability to implement and use this procedure.

### 10.4 Subcontractors

Subcontractors and Visitors are also required to take positive actions to avoid or correct potential hazards and to ensure that safe and healthful workplace conditions are maintained. Subcontractors are responsible for any legal liability arising from or in connection with the failure of their employees, agents and subcontractors to act in compliance with all applicable federal, state, and local requirements.

### 10.5 Drug and Alcohol Abuse Policy

It is the Policy of Bianchi Industrial Services, LLC, Inc. to maintain a drug and alcohol free work place. A complete copy of the corporate Drug and Alcohol Policy can be provided if requested.

# **11.Employee Training Requirements**

### 11.1 General Safety and Health Training

All employees are required to have the following general health and safety training. All employees must provide proof of training before beginning work on-site. If necessary, Bianchi Industrial Services, LLC / Environmental Safety and Control, LLC will provide this training.

- Hazardous Waste Operations and Emergency Response, initial and current annual refresher (for all employees performing work in an Exclusion or Contaminate Reduction Zone See Section 6)
- Hazard Communication
- Personal Protective Equipment, including hearing and respiratory protection
- Fall Protection

Asbestos subcontractors must have current NYS Asbestos License.

### 11.2 Site-Specific Training

### 11.2.1 Initial Employee Site Safety Orientation Training

Prior to the commencement of onsite field activities an initial site-specific training session will be conducted by the Project Superintendent. All employees will receive site-specific training in the form of an onsite briefing to ensure that all personnel are familiar with requirements and responsibilities for maintaining a safe and healthful work environment.

The Site Safety and Health Officer will be responsible for keeping a record of all training periods. During the site-specific training, employees will be instructed on the following topics:

- Employee and Supervisor personnel responsibilities, including those for reporting all accidents,
- Content and implementation of the Site-Specific Health and Safety Plan, including specific safe work practices (i.e. Fall Protection, Rigging, Torch Cutting, etc.)
- Hazard Communication Program, including review of Applicable MSDSs.
- Site hazards and controls,
- Emergency information, including procedures for obtaining medical treatment or emergency assistance,
- Procedures for reporting and correcting unsafe conditions or work practices,

### **11.2.2 Daily Safety Training**

The Site Safety and Health Officer will provide daily safety training. The Site Safety and Health Officer will be responsible for keeping a record of all training periods. The training will address topics such as, safety and health procedures, work practices, changes to the Site-Specific Health and Safety Plan, activity hazard analysis, work tasks, air monitoring results and a review of safety discrepancies and accidents. All employees and subcontractors are required to attend.

Appropriate topics will be chosen based on current work tasks and results of daily safety inspections.

# 12. Medical Surveillance Requirements

A baseline physical examination must be conducted on employees before they are allowed to engage in activities involving hazardous materials. Medical monitoring will also be conducted any time an employee becomes injured or ill from site exposure or any time there is suspected excessive chemical exposure that would be medically detectable. Documentation that on-site personnel have met the medical surveillance requirements of 29 CFR 1910.120 and the Site-Specific Health and Safety Plan will be kept on-site by the HSO.

Specifically, the medical examinations are required for:

- All personnel entering exclusion or contaminate reduction zones or performing work which requires a respirator.
- All personnel on-site who may be used for emergency response in the exclusion zone.

Medical surveillance shall be administered by an occupational physician. Content of the medical examinations shall be the responsibility of the physician, but must meet the requirements of 29 CFR 1910.120(f) (3).

### 12.1 Physicians Written Opinion

Before work begins, each employee shall submit a copy of the physician's written opinion about the employees' ability to perform hazardous waste site work and wear a respirator. The opinion shall address the employee's ability to perform hazardous remediation work and include the following:

- The physicians recommended limitations upon the employee's assigned work and/or PPE usage;
- The physicians opinion about increased risk to the employee's health resulting from work,
- A statement that the employee has been informed of the results of the examination

# 13.Site Control

The purpose of site control is to minimize exposure to onsite workers, prevent unauthorized entry to the site and prevent the spread of contamination. A chain link fence will be erected around the site to minimize public exposure.

The following work zone approach will be used when performing work related to the removal and off-site disposal of drainage pipe and soil from the remains of Buildings 7, 7A, 11, and 26.

### 13.1 Site Work Zones

A three-zone approach shall be used during site operations in order to contain the potential spread of chemical contamination and control the flow of personnel, vehicles, and materials into and out of contaminated work areas. The zones include the exclusion zone, the contaminate reduction zone and the support zone. The exclusion zone and contaminate reduction zone will be designated using temporary construction fence.

### 13.1.1 Exclusion Zone

The exclusion zone(s) is the area of known or suspected contamination. These areas will be clearly marked using orange construction fence or caution tape. Only personnel involved in the work activities shall be allowed in the exclusion zone. Proper PPE, as determined by the HSO shall be worn by personnel entering and working in the exclusion zone. Exclusion zones will be setup whenever intrusive activities are occurring, and may be modified based on field conditions and air monitoring results. Exit from an exclusion zone may only be made through the contaminate reduction zone.

An exclusion zone will be established for around the remains of Buildings 7, 7A, 11, and 26 during removing of the drainage pipe and contaminated soil.

### 13.1.2 Contaminate Reduction Zone

The contaminate reduction zone (CRZ) is the "buffer zone" between the contaminated areas and the clean area. This zone serves as a point of decontamination for equipment and personnel, and material transfer from the clean zone to the exclusion zone. This zone may also provide first aid stations and rest areas (upwind of exclusion zone). The contaminate reduction zone will also be clearly marked with orange construction fence or caution tape. PPE may be required in the CRZ, as determined by the HSO after air monitoring and site inspection. A Contaminate Reduction Zone will be in place for all exclusion zones established on site.

### 13.1.3 Support Zone

The support zone includes all areas not defined by the contaminate reduction or exclusion zones. Administrative services, bulk storage supply, job site shipping and receiving and personal vehicle parking will be located in this zone. The support zone should have negligible potential for exposure to contaminates on site. Normal work clothes may be worn in the support zone.

### 13.2 Site Control Log

A log of all personnel visiting, entering, or working on the site will be maintained by the HSO. The log will contain the following:

- Date,
- Name,
- Agency or company,
- Time entering and exiting,

All visitors must show proof of current training, medical surveillance before entering the CRZ or Exclusion Zone. All personnel must fill out a Certificate of Worker or Visitor Acknowledgment form.

### 13.3 Communication

Both onsite and offsite communication will be maintained at all times. Onsite communication will be by radio. Offsite communication will be by telephone or cellular phone. A list of emergency telephone numbers is included in Table 11-1, Section 13 of this Site-Specific Health and Safety Plan.

# **14.Chemical Hazards**

This project involves potential to exposure to chemical hazards related to both chemicals brought on-site (fuel, oil, compressed gasses etc.), asbestos, lead and residual chemicals related to previous manufacturing operations and / or the structural fires previously occurring on-site.

Hazards related to chemical brought on-site will be managed by through our Hazard Communication Program, as summarized below.

The following sections summarize chemical hazards and the controls that will be used to control these hazards.

# 14.1 Hazard Communication Program

Chemicals pose a wide range of health hazards (such as irritation, sensitization, and carcinogenicity) and physical hazards (such as flammability, corrosion, and reactivity). OSHA's Hazard Communication Standard (HCS) is designed to ensure that information about these hazards and associated protective measures is disseminated to workers and employers.

The basic goal of Bianchi Industrial Services, LLC's Hazard Communication Program is to ensure employees know about these hazards and how to protect themselves. This is accomplished through proper use of labels, MSDSs and training. MSDSs for chemicals to be brought on-site will be maintained on-site in the site office. All chemicals will be properly labeled if transferred from their original packaging.

# 14.2 *Lead*

Lead is present in coatings in both Building 36 and 20A. Manual demolition of interior walls is anticipated. Exposure to lead is possible during this operation. Lead exposure will be controlled in accordance with the Lead Compliance Plan, submitted under separate cover.

# 14.3 Asbestos

Asbestos containing materials will be removed from the structures prior to demolition. This work will be performed by NYSDOL Licensed Asbestos Handlers in accordance with the specification, NYSDOL Industrial Code Rule 56 and the Asbestos Abatement Plan, submitted separately.

If additional suspect ACM in encountered during building demolition, Bianchi will stop work in that area and notify ENSR representatives immediately.

# 14.4 Site Chemical Contamination

Contaminates found at the Mohasco Mills Complex include Polycyclic Aromatic Hydrocarbons (PAHs), Metals, and Pesticides. PCB contamination was previously remediated in 1999-2000. The relatively high concentrations of PAHs and certain metals at the site are likely the result of

ash and soot from the former coal burning steam plant as well as the fires which have occurred on-site.

The following provides a summary of site contaminates.

### 14.4.1 Polycyclic Aromatic Hydrocarbons (PAHs)

The site investigation data show occurrences of PAHs in the site soils and creek sediments above NYSDEC guidance levels. PAH's detected include anthracene, phenanthrene, 2-methylnathalene, pyrene, naphthalene, acenaphthene, flourene, fluoranthene, Benzo(a)athracene, Chrysene, benzo(b)fluoranthene, benzo(k)flouranthene .

PAHs are a group of organic compounds consisting of three or more fused benzene rings containing only carbon and hydrogen. This group of compounds contains thousands of organic substances.

Common routes of exposure are through inhalation and dermal contact. Increased incidences of bronchitis and cancer of the lungs, skin, bladder, and kidneys are associated with chronic exposure to PAHs. Phototoxic skin reactions and irritation to the eyes have been attributed to chronic exposure. Acute toxicity of PAHs is low.

### 14.4.2 Metals

Barium, copper and zinc have been detected at surface soils site in concentrations exceeding NYSDEC TAGM clean up criteria. Arsenic, lead and zinc have need detected in sediment samples collected from the creek.

Heavy metals can affect the liver, brain and lungs, although each metal causes its own characteristic symptoms.

### 14.4.3 Pesticides

Aldrin and dieldrin have been detected in the drain lines in the floor of the Building 7. Aldrin and dieldrin are the common names of two structurally similar compounds that were once used as insecticides. Pure aldrin and dieldrin are white powders, while technical-grade aldrin and dieldrin are tan powders. Aldrin and dieldrin slowly evaporate in the air and both have mild chemical odors.

Exposure to aldrin is generally limited because aldrin is changed quickly to dieldrin in the environment. Exposure to moderate levels of aldrin or dieldrin can causes headaches, dizziness, irritability, vomiting, or uncontrollable muscle movements. Long term exposure can affect the central nervous system, liver, kidneys.

Chemical	TWA	Likely Route	Symptoms of Exposure & Health Effects	First Aid
	Exposure Limit	of		
		Exposure		
PAHs	PEL - 0.2 mg/m <sup>3</sup> REL - 0.1 mg/m <sup>3</sup>	Inhalation Skin Contact	Phototoxic skin reactions, eye & respiratory irritation, cancer of lungs, skin, bladder, and	Eye: Irrigate immediately Skin: Rinse & Soap wash immediately
(PAHs refers to class of chemical)	(For most PAHs)		kidneys	Breathing: Fresh air and/or Respiratory support Swallow: Rinse mouth, drink milk / water, Medical attention immediately
Barium	PEL - $0.5 \text{ mg/m}^3$ REL - $0.5 \text{ mg/m}^3$	Inhalation	Irritation eyes, skin, upper respiratory system; skin burns; gastroenteritis; muscle spasm; slow pulse	Eye: Irrigate immediately Skin: Water flush immediately Breathing: Respiratory support Swallow: Medical attention immediately
Copper	PEL - 1 mg/m <sup>3</sup> REL - 1 mg/m <sup>3</sup>	Inhalation	Irritation eyes, respiratory system; cough, dyspnea (breathing difficulty), wheezing; potential occupational carcinogen	Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately
Zinc	PEL – 5 mg/m <sup>3</sup> REL - 5 mg/m <sup>3</sup>	Inhalation	Metal fume fever: chills, muscle ache, nausea, fever, dry throat, cough; metallic taste; headache; blurred vision; low back pain; vomiting; malaise; chest tightness; dyspnea decreased pulmonary function	Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately
Arsenic	PEL - 0.01 mg/m <sup>3</sup> REL - 0.002 mg/m <sup>3</sup>	Inhalation	Ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, respiratory irritation, hyperpigmentation of skin, [potential occupational carcinogen	Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately
Lead	PEL - 0.05 mg/m <sup>3</sup> REL - 0.05 mg/m <sup>3</sup>	Inhalation	Lassitude, insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles	Eye: Irrigate immediately Skin: Soap flush promptly Breathing: Respiratory support Swallow: Medical attention immediately
Aldrin / Dieldrin	PEL - 0.25 mg/m <sup>3</sup> REL - 0.25 mg/m <sup>3</sup>	Inhalation Skin Contact	Headache, dizziness; nausea, vomiting, malaise	Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately

#### **Table 7-14-1 - Summary of Potential Health Effects**

# 8. Hazards / Safety Procedures

Many physical hazards are anticipated during site activities. The following sections outline potential physical hazards to be encountered and procedures to control each hazard.

Due to the dynamic nature of this program, a job hazard analysis (JHA) for each task that presents a new hazard not adequately addressed in the SSHP will be completed. An example of the JHA form that to be used is included in Attachments.

### 8.1 Demolition Activities

Demolition work involves many of the hazards associated with construction. However, demolition incurs additional hazards due to unknown factors such as:

- Deviations from the structure's design introduced during construction,
- Approved or unapproved modifications that altered the original design,
- Materials hidden within structural members, and
- Unknown strengths or weaknesses of construction materials.

To counter these unknowns, all personnel involved in a demolition project must be fully aware of these types of hazards and the safety precautions to take to control the hazards.

If roadblock or traffic barricades are necessary, Bianchi will provide trained personnel to direct pedestrian traffic and vehicular traffic when the road is blocked or access is restricted.

All work will be performed in accordance with the project Specification and OSHA regulations. All work will be performed in accordance with 29 CFR 1926, Subpart T, including the following;

- Prior to permitting employees to start demolition operations, an engineering survey will be made, by a competent person, of the structure to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure. A copy of the engineering survey will be inserted in Appendix 2 once complete.
- All electric, gas, water, steam, sewer, and other service lines will be shut off, capped, or otherwise controlled, outside the building line before demolition work is started. In each case, any utility company which is involved will be notified in advance.
- If it is necessary to maintain any power, water or other utilities during demolition, such lines will be temporarily relocated, as necessary, and protected.

- Hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances maybe present in pipes, ductwork, tanks, or other equipment on the property.
- Shattering of glass will be avoided to the extent possible.
- Only those workers necessary for the performance of demolition operations will be permitted in demolition area. Four (4) foot orange construction fence will be established around each area of demolition and lay down area. Fences will be posted with restricted access signage.
- During demolition, continuing inspections will be made by the HSO as the work progresses to detect hazards resulting from weakened or deteriorated floors, or walls, or loosened material. No employee is allowed to work where such hazards exist until they are corrected by shoring, bracing, or other effective means.
- Masonry walls, or other sections of masonry, will not be felled upon the floors of the building in such masses as to exceed the safe carrying capacities of the floors.
- All walls will be left in a stable condition at the end of each shift. No wall section, will be left without lateral bracing, unless such wall was originally designed and constructed to stand without such lateral support, and is in a condition safe enough to be self-supporting.
- Work will be suspended if weather conditions are unsafe.
- In buildings of "skeleton-steel" construction, the steel framing may be left in place during the demolition of masonry. Where this is done, all steel beams, girders, and similar structural supports will be cleared of all loose material as to prevent overhead hazards.

### 8.2 Elevated Work / Falls Protection

It is not anticipated that employees will need to enter the building or work at elevated work areas during demolition. However, it is the policy of Bianchi Industrial Services, LLC that all employees working at heights greater than 6 feet, or where a fall form lower heights may result in serious injury (i.e. Impalement) utilize fall protection. "100 Percent fall protection" is required at all times. Violation of this policy is considered a serious violation which can result in immediate termination.

The use of fall protection systems will be used to minimize hazards associated with falls from heights. It is anticipated that personal fall arrest and/or fall restraint systems and barricades will be used. A personal fall arrest / fall restraint system includes the use of full body harness, shock absorbing lanyard or tether and appropriate attachment point. Use of fall restraint system may be necessary if work must be performed on the roof.

### 8.3 Working Near or Over water

Employees working over or near water will wear U.S. Coast Guard-approved life jacket or buoyant work vests. Buoyant work vests or life preservers shall be inspected before and after each use. Defective units shall not be used.

Ring buoys with at least 90 feet of line shall be provided and readily available for emergency rescue operations. Ring buoys must be located within 200 feet of work area.

A lifesaving skiff will not be available, as the North Chuctanunda Creek is not navigable.

Fencing may be erected in certain work areas to prevent employees from nearing the edge of the creek. Life preservers will not be required in these work areas.

### 8.4 Pedestrian and Vehicle Traffic

Pedestrian traffic will be controlled by site perimeter fencing.

Temporary closure of Lyon Street may be necessary during demolition of Building 36. Any road closures will be coordinated in advance with ENSR and City of Amsterdam personnel. Bianchi will provide spotter to direct vehicle or pedestrian traffic, if required.

### 8.5 Open Flame / Hot Work

Torch cutting structural steel is not anticipated, as building 36 is a concrete and brick structure and the steel in Building 20 A can be sheared and /or dismantled utilizing demolition equipment. Torch cutting rebar is anticipated. During torch cutting activities, Bianchi will:

- Properly use and store compressed gas cylinders.
- Utilize fire watch.
- Issue Hot Work Permit (see attachments)

### 8.6 **Proximity to Heavy Equipment**

Working around heavy equipment poses obvious physical hazards. Workers could easily be injured or killed if hit by heavy equipment. These hazards can be reduced by minimizing the number of workers and equipment in the same area, maintaining a clear field of view for drivers and operating equipment at safe speeds.

Heavy equipment will be operated under the following conditions:

- The operation of heavy equipment will be limited to authorized personnel specifically trained in its operation.
- The operator will use the safety devices provided with the equipment, including seat belts.

- While in operation, all personnel not directly required in the area will keep a safe distance from the equipment.
- Personnel directly involved in an activity will avoid moving into the path of operating equipment. Areas blinded from the operator's vision will be avoided and barricaded as necessary to prevent inadvertent entry into blind spots.
- Additional riders will not be allowed on equipment unless it is specifically designed for that purpose.

### 8.7 Slip/Trip/Fall Injuries

As with any construction project, Demolition sites poses numerous slip, trip and fall hazards. These hazards can be reduced by avoiding work on slippery surfaces, wearing slip resistant footwear, working with a low center of gravity and making slow and deliberate movements. Personnel must be aware that the protective equipment worn may limit dexterity and visibility and may increase the difficulty of performing some tasks.

### 8.8 Fire Prevention

The following rules will be enforced to prevent fires:

- Smoking will be prohibited inside buildings at the Mohasco Mills Complex at all times.
- Bianchi will provide fire watch for all open flame work.
- Flammable and /or combustible liquids will be handled only in approved, properly labeled metal safety cans (type I or type II) equipped with flash arrestors and self-closing lids.
- Transfer of flammable liquids from one container to another will be done only when the containers are electrically interconnected.
- The motors of equipment being refueled will be shut off.
- All flammable / combustible liquids stored in metal drums will be equipped with self-closing safety faucets, vent bung fittings, and drip pans. Drums containing flammable material will be properly grounded.
- The site Safety Officer will periodically inspect fuel storage locations for evidence of any spills.
- Basic spill response equipment including adsorbent pads and booms, drums and miscellaneous tools will be available onsite in case of spill. Spill kits will be maintained onsite for the duration of the project. Bianchi Industrial Services, LLC will promptly clean-up any spills related to demolition work, refueling or chemical / fuel storage.

### 8.9 Overhead Hazards

Falling objects from overhead work can cause serious, debilitating head injuries. Hard Hats are required at all times on-site.

Work zone control areas are required to prevent individuals from walking under work taking place heights above. Barrel and tape barriers will be placed around all active work areas. The west side of Building 36 will be fenced off with construction fence until loose bricks from Building 36 are removed and top of Building 36 is stabilized.

### 8.10 Weather

In addition to heat extremes, severe rain, snow or electrical storms can also pose risks to site workers. Driving hazards are also increased in poor weather. Work may need to be stopped under such conditions. Outside work should be suspended during electrical storms.

### 8.11 Sharps - Jagged, ripped steel.

Sharp objects and debris are common at demolition sites. Care must be taken to prevent stab and cut wounds. Proper PPE including steel toe boots with sole plate and work gloves can minimize this risk.

### 8.12 Use of power and hand tools

Only tools with grounded three wire plugs should be used. GFIs must be used whenever power tools are used. Tools must be checked frequently for defects and maintained properly. All tools must be unplugged before making adjustments or repairs.

The following will also reduce the hazard associated with working with power and hand tools:

- No explosive power actuated tools will be used onsite.
- Only use tools for which you have been properly trained.
- Maintain all equipment guards and never remove or block.
- Make frequent inspections for defective blades, wheels, cords and plugs.
- Assure all electrical tools are properly grounded.
- Never use grinding wheels in excess of their safe operating speed.
- Air hoses on pneumatic tools should not be disconnected until pressure is relieved.
- Compressed oxygen must never be used to power pneumatic equipment.
- Hand tools must be kept in good repair.
- Tools should only be used for the purpose they were designed.
- Tools should never be left on ladders, scaffolds or other area where they will create a trip or fall hazard.
- Tools should be properly stored when not in use.

### 8.13 Manual Lifting

Back injuries are the most common injury in the construction industry. Injuries are usually caused by improper lifting techniques. The following lifting techniques will help reduce lifting injuries:

- Inspect the work area before lifting for trip hazards.
- Set feet solidly and well apart, with one foot slightly ahead of the other.
- Crouch as close to the load as possible, with the legs bent.
- Keep back as straight as possible.
- Do not twist or turn during lifting.
- "Lift with your brain then lift with your back."

### 8.14 Fueling Vehicles

All equipment should be shut off, with ignition off, during fueling operations. Smoking is not allowed near fueling stations.

### 8.15 Electrical Hazards

All electrical service will be disconnected before any demolition activities begin. Before any excavation work begins, utility clearances must be obtained and documented. Dig Safe NY was utilized for underground utility locations. All temporary power will be protected by Ground Fault Interrupter (GFI). All extension cords will be heavy duty or extra heavy duty type.

### 8.16 *Noise*

Requirements set forth in the Hearing Conservation Regulations (29 CFR 1910.95) will be adhered to during work on site. Hearing protection will be provided where sound pressure levels exceed 85 dB A scale. The Site Safety and Health Officer will identify areas of high noise that require hearing protection. Monitoring will be performed to determine noise levels and the need for hearing protection.

### 8.17 Confined Space Entry

Confined space entry is not anticipated during this project. Should confined spaces entry be necessary it will be done in accordance with 29 CFR 1910.146, *Confined Space Entry*.

### 8.18 Material Handling

Proper material handling procedures will be utilized during all material handling activities. The following general material handling rules will be followed:

• Use good back posture when lifting,

- Never walk under a suspended load,
- Always wear a hard hat and foot protection,
- Only use qualified equipment operators,
- Be aware of contaminated equipment,
- Never walk in front of moving equipment,
- Keep all loose clothing away from moving and mechanical parts,
- Never add fuel to running equipment.

### 8.19 Well Decommissioning / Drill Rig Safety

The following will controls will be utilized during well decommissioning. Well decommissioning requires over drilling using a drill rig.

- Well decommissioning will be performed by a specialty subcontractor experienced in this work. All subcontractor employees must be properly trained in the operation of the drill rig.
- All equipment must be properly and routinely maintained.
- A daily, pre-shift inspection of drilling equipment must be made. Any deficiencies must be corrected before using equipment.
- Proper PPS must be worn and include: Hard hat, steel toe work boots, hearing protection, eye protection, tight fitting clothing and gloves. No loose fitting clothing, jewelry or hair is allowed.
- Underground utility clearance must be obtained and drill rig must not be set up near overhead power lines.
- All drill rigs must be equipped with first aid kit and fire extinguishers.
- The drill rig must not be moved with the mast elevated.
- All equipment guards must be maintained and in place when rig is in operation.
- Proper housekeeping must be kept at all times.
- Operations must be suspended during threatening weather (heavy wind and / or thunder storms)
- Proper material handling of heavy items (bentonite, augers, cores, etc.) must be considered. See Section 8.18.
- Operators must position themselves such that they avoid all moving parts of the drill rig.

# 9. Personal Protective Equipment

The purpose of Personal Protective Equipment (PPE) is to shield or insulate individuals from the chemical and physical hazards that may be encountered during various work activities. The level of PPE required for each work task will be based upon the hazard/risk analysis associated with that task. The components of the PPE ensembles for each level of protection will be selected and/or modified based on site-specific conditions, including heat and cold stress potential and safety hazards. Onsite personnel will be provided with the appropriate PPE ensembles to perform the tasks they are assigned.

### 9.1 Levels of Protection

Each activity conducted onsite may present different hazards and therefore require different levels of PPE. The basic levels of protection are D, Modified D, C, B, and A.

### 9.1.1 Level D

Level D is the minimal protection level when respiratory or skin protection is not required. Level D protection includes:

- Hard hat
- Eye protection (safety glasses, goggles, or face shield)
- Hearing protection (as needed)
- Work boots (steel toe/shank)
- Over boots (optional)
- Traffic Vest, when necessary

### 9.1.2 Modified Level D

Modified level D may be required when directly handling contaminated wastes, soils, or water. Modified level D protection includes:

- Hard hat
- Eye protection (safety glasses, goggles, or face shield)
- Hearing protection (as needed)
- Work boots (steel toe/shank)
- Latex / PVC Over boots
- Nitrile gloves (when handling contaminated wastes, soils, or water)
- Disposable, hooded, Tyvek or equivalent
- Polyethylene coated Tyvek (Tychem QC), when working with liquids or muddy soils

### 9.1.3 Level C

Level C will be used when toxic substances and/or concentrations are known and criteria for using air-purifying respirators can be met. This level of protection includes:

- Air purifying respirator equipped with appropriate NIOSH approved cartridges
- Tyvek Coverall with hood and foot
- Work Gloves
- Boots chemical resistant, steel shank, or disposable latex /PVC over steel toe boots

Level C protection will be used during asbestos abatement and if air concentrations exceed action levels during sump cleaning set forth in this Site-Specific Health and Safety Plan.

### 9.2 Initial Level of PPE Required

Table 8-1 gives a listing of the PPE requirements for various work locations and tasks and the additional requirements should upgrade be necessary. PPE will be upgraded should air concentrations measured at the work zone exceed action levels set forth in this Site-Specific Health and Safety Plan.

Work Task	Initial Level	Protective Equipment	Upgrade
	Of Protection		
<ul> <li>General Site Activities</li> <li>Mobilization / Demobilization</li> <li>Utility Clearance</li> <li>Security Fencing</li> <li>Erosion Control</li> <li>Site Restoration</li> <li>Community Air Monitoring</li> <li>Demolition</li> <li>Site Cap / Grading</li> </ul>	D	<ul> <li>Hard hat</li> <li>Safety glasses / goggles</li> <li>Hearing protection (as needed)</li> <li>Steel toe work boots</li> <li>Over boots (optional)</li> <li>Work gloves (optional)</li> <li>Traffic Vest, when necessary</li> </ul>	<ul> <li>Full Face Air purifying respirator with HEPA/Organic Vapor Cartridge.</li> <li>Inner and outer chemical resistant gloves</li> <li>Tychem SL coveralls</li> <li>Chemical resistant boots</li> </ul>
<ul> <li>Contaminated Material Activities</li> <li>Removal of contaminated pipe and soil form B 7, 7A, 11, 26</li> </ul>	Modified D	<ul> <li>Hard hat</li> <li>Eye protection</li> <li>Hearing protection (as needed)</li> <li>Steel toe work boots</li> <li>Over boots</li> <li>Chemical resistant gloves (nitrile)</li> <li>Tychem QC coverall</li> </ul>	Full Face Air purifying respirator with HEPA/Organic Vapor Cartridge
Work Task	Initial Level Of Protection	Protective Equipment	Upgrade

### **Table 9-1- Initial PPE Requirements**

Asbestos Abatement	Level C	<ul> <li>Hard hat</li> <li>Eye protection</li> <li>Work boots</li> <li>Work gloves</li> <li>ARP with P100 filters</li> <li>Tyvek coverall (hood &amp; foot)</li> </ul>	• PAPR with P100 filters
Torch Cutting		<ul> <li>Hard hat</li> <li>UV Eye protection</li> <li>Steel toe work boots</li> <li>Work gloves</li> <li>Burn coat</li> <li>Burn Gloves</li> <li>Please note – if Lead is present, Lead Compliance Plan Applies.</li> </ul>	

### 9.3 Protective Clothing / Equipment Criteria

Personal protective equipment can reduce the possibility of contact with hazardous materials, but it should be used in conjunction with proper site entry protocols and other safety considerations. No single combination of protective apparel and equipment is capable of protecting against all hazards. The use of protective apparel and equipment can create significant worker hazards (e.g. heat stress, physical & psychological stress, impaired vision, mobility, and communications.) For any given situation, apparel will be selected to provide a level of protection commensurate with the degree of hazard. Over protection, as well as under protection, can be hazardous and will be avoided.

### 9.3.1 Foot Protection

Sturdy, steel toe, steel shank work boots will be worn to protect feet from compression or puncture injury.

### 9.3.2 Eye and Face Protection

All employees will wear ANSI Z87 approved eye protection (e.g., safety glasses, goggles, face shield, etc.) at all times while on-site. There will be no exceptions.

#### 9.3.3 Head Protection

ANSI approved hard hats will be worn by all workers and visitors at all times while onsite, except in designated areas (e.g., office trailers and inside work vehicles).

### 9.4 Respiratory Protection Program

Respiratory Protection will be provided to employees when performing Asbestos related work. Any employee who may be required to wear a respirator will do so in compliance with OSHA regulations, 29 CFR 1910.134, *Respiratory Protection*. The following Respiratory Protection Program will be adhered to anytime respirators are required.

### 9.4.1 Purpose

The purpose of this respirator program is to ensure the protection of all employees from respiratory hazards, through proper use of respirators. This program has been prepared in accordance with 29 CFR 1910.134, *Respiratory Protection*.

#### 9.4.2 Respirator Selection

Proper respiratory protection will be determined pending the results of the initial lead assessment for Lead and Asbestos. Only NIOSH approved respirators will be worn. No change of respirator is allowed without approval by the Site Safety and Health Officer. If Air purifying respirators are specified, respirator cartridges will be disposed of any time breathing resistance increases. In addition, each respirator cartridges will be replaced a minimum of once per shift. Refer to the Lead Compliance Plans, Appendix 4, for more information.

#### 9.4.3 Respirator Assignment

Each employee will be assigned his own respirator. No sharing of respirators is allowed. Each respirator will be clearly marked by employee name. Each employee is responsible for securing his respirator and prevents theft or loss.

#### 9.4.4 Employee Training

All employees must be trained on the proper use of respirators prior to use. Any new employee will require respiratory protection training before performing any operations requiring the use of a respirator. Bianchi Industrial Services, LLC training program includes the following elements.

- The reason why respiratory protection is needed
- The nature and effects of respiratory hazards to which employees may be exposed
- An explanation of why a particular respirator has been selected for use.
- An explanation of why a particular type of respirator has been selected for a specific hazard.
- Instruction in inspecting, donning, checking the fit and wearing the respirator
- An opportunity for each respiratory wearer to handle the respirator, learn how to don and wear it properly, check seals, and be fit tested.
- An explanation of proper maintenance and storage.
- Instruction on how to recognize and cope with emergencies.

### 9.4.5 Storage

Respirators must be stored in a way that protects it from dust, sunlight, heat, extreme cold, excessive moisture and damaging chemicals. A clean reusable bag provides a contaminate-free storage method. Do not hang the respirator by the headbands or place it in any position that may cause distortion, which could lead to a damaged face to mask seal.

Each employee is responsible for storing his own respirator in an appropriate manner. Respirators will be stored in the site office when not in use.

#### 9.4.6 Inspection and Maintenance

Respirators will be inspected each day before use. These routine checks are vital in maintaining a respirator that will protect you from hazardous chemicals.

The following should be done each day:

- Check all valves and seals for cracks, dirt, grit or anything that might cause a leak.
- Check all rubber & plastic parts for deterioration.
- Check headbands for good elasticity.
- Keep a written record of inspection dates and findings.

If any major problems are found with your respirator, it should be disposed of immediately.

#### 9.4.7 Cleaning

Respirators should be cleaned any time it is necessary. To clean the respirator, remove cartridges and clean with soap and water. If need be, the respirator can be disinfected with isopropyl alcohol or a mild solution of bleach and water.

#### 9.4.8 Fit Testing

All employees who wear a respirator must be fit tested to assure the respirator fits and does not leak. Onsite fit testing will be performed using a qualitative fit test. During the test, the wearer of a respirator is exposed to a harmless irritant smoke while performing exercises similar to workplace functions. The respirator is equipped with a cartridge that can remove the irritant from the air. A good fit is achieved when the wearer cannot detect the odor.

Every time a wearer puts on a respirator, a positive and negative fit test must be performed. Fit test forms are included in the Attachments.

#### 9.4.9 Medical Surveillance

Before assignment where respirators are required, employees must be determined medically fit to wear a respirator by an occupational physician.

# **10.Air Monitoring Plan**

Inhalation hazards are caused by exposure to airborne concentrations of vapors and/or contaminated dust. In order to reduce the exposure to airborne hazards, the following Air Monitoring Plan shall be followed. The purpose of the Air Monitoring Plan is to determine the proper level of personal protective equipment and to document that the level of personal protective equipment is adequate. The Air Monitoring Plan includes both real-time and documentation monitoring at the work area.

# 10.1 Air Monitoring Equipment

Air monitoring equipment shall include Total Particulate Monitors and personal air sampling pumps and any associated calibration equipment. All equipment will be calibrated and maintained according to manufacturer's instruction on a daily basis. Maintenance and calibration logs will be kept on site. Table 9-1 lists the air monitoring equipment to be used.

Instrument	Manufacturer	Range	Calibration
Total Particulate Monitor	TSI - Dust Track	0.001 - 100 mg/m3	Factory
PID	REA Systems, MiniRAE 2000	0-10,000 ppm	Daily
Personal Sample Pump	SKC	NA	Daily

**Table 10-1- Air Monitoring Equipment** 

# 10.2 Work Area

Work area monitoring will be performed when performing building demolition. The purpose of work area monitoring is to ensure appropriate PPE is being worn by site personnel. Work area monitoring will consist of both real time and personal monitoring.

# **10.2.1 Real Time Monitoring**

Real time area monitoring for VOCs and total dust will be conducted in the work zone during excavation and contaminated soil handling activities until deemed safe by the SSO. The purpose of real time monitoring is to determine if an upgrade or downgrade of PPE is required. Any monitored results above set action levels will require upgrades in PPE, work stoppage and/or site evacuation.

Real Time Air Monitoring data will be recorded daily on the Air Monitoring Log sheet (see Attachments).
### **10.2.2 Personnel Monitoring**

Personal air samples will be collected from "high risk" workers during building demolition and other site activities where employees may encounter contamination. Samples will be collected and analyzed for total particulates, lead and / or silica, as appropriate. At a minimum, one (1) sample will be collected per week.

Personal air monitoring for asbestos will be conducted during asbestos abatement activities and during demolition of the asbestos containing roof. An initial exposure assessment will be conducted for each asbestos operation and work area (laborer, operator, etc.). The frequency of personal asbestos monitoring will be based on the results of the initial assessment. Asbestos samples will be collected and analyzed utilizing NIOSH Method 7400.

Personal air monitoring for lead will be conducted during building demolition. An initial exposure assessment will be conducted for each lead operation and work area (laborer, operator, etc.). The frequency of lead monitoring will be based on the results of the initial assessment. Lead samples will be collected and analyzed utilizing NIOSH Method 7300.

### 10.3 Action Levels

Action levels are work area concentrations of organic vapor and dust which require an upgrade in Personal Protective Equipment, or where personnel must exit the area until other remedial or engineering controls are utilized to reduce the concentrations below the action level. When an action level is exceeded, the control (upgrade of PPE or work stoppage) must continue until air monitoring results taken by the Site Safety and Health Supervisor document concentrations are below the action level.

Table 10-2 summarizes action levels which will be used.

Contaminant	Monitoring Location	Action Level	Control Action
Total Organic Vapors	Work Area	< 1 ppm	Normal Operations, continue work zone monitoring
		>1 to 5 ppm	Continue monitoring
		> 5 – 10 ppm	Level C upgrade, increase frequency to 15 min, Implement VOC controls:
			Cover soil piles
			<ul> <li>Apply vapor suppressant</li> </ul>
			Reduce open excavation
		> 10 ppm	Stop Work, implement additional engineering control
Total Particulates	Work Area	< 0.1 mg/m3	Normal Operations
		> 0.100 mg/m3	Implement Dust Control; wet work area, upgrade to Level C if wetting not effective
		> 0.150 mg/m3	Stop Work, implement additional engineering control

 Table 10-2 – Action Levels

< - Less Than

> - Greater than

HSM - Health & Safety Manager

### 10.4 Community Air Monitoring Plan

This Community Air Monitoring Plan (CAMP) will be implemented during building demolition activities, including material segregation, stockpiling and loading for offsite disposal. This CAMP fulfills the requirements as set forth by the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan, dated June 2000, and NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) 4031, "Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites".

#### **10.4.1** Air Monitoring Procedures

Real-time and documentation air monitoring will be implemented at the site perimeter for total particulate matter and volatile organic compounds (VOCs). The perimeter will be considered the start of the surrounding community for the purposes of this air monitoring program. Upwind and downwind locations will be determined through observation of an on-site meteorological station.

The following subsections describe the air monitoring procedures to be conducted.

### 10.4.1.1 Monitoring Station Location Selection and Deployment

Perimeter air monitoring procedures will be implemented at four of eight established perimeter locations. Sample stations will be erected at approximately equidistant points around the site and marked with high visibility paint and / or flags. Exact locations of the monitoring locations will be determined in consultation with ENSR after site mobilization. The four locations to be used will be chosen daily by ENSR according to site activities and expected wind direction.

On mornings when there is no apparent wind direction, upwind and downwind monitoring locations will be determined by prevailing wind direction.

### 10.4.1.2 Particulate Monitoring

Real-time airborne particulate monitoring will be conducted continuously during building demolition, sediment removal, grading, and any other activities involving potential contaminated material. Real time particulate monitoring will be conducted at locations upwind and downwind along the perimeter of the site using instrumentation equipped with electronic data-logging capabilities. A TSI Dustrack will be used to conduct the real-time particulate monitoring. All running average (15-minute intervals) concentrations will be recorded by data logger.

Documentation particulate monitoring will be conducted at the perimeter sampling locations twice weekly. At the end of the sampling period, meteorological data will be reviewed and one upwind and two downwind samples will be analyzed. Samples will be collected an analyzed by NIOSH Method 0500.

Particulate monitoring will be conducted approximately 6 feet above ground and clear of any obstructions (buildings, trees, etc.). Dustrak monitors will be housed in a water tight enclosure with sample inlet. The Dustract monitor will be powered by rechargeable 6 volt battery. Typically a tractor or motorcycle battery is used. This type battery provides sufficient power for 3-4 days operation before recharging is required. Batteries will be charged on a rotating basis to ensure equipment is properly powered.

### 10.4.2 VOC Monitoring

Real Time VOC monitoring will be performed at one of the downwind perimeter air monitoring stations. Monitoring will be done utilizing a REA Systems photoionization detector (PID) equipped with a data logger. All running average (15-minute intervals) concentrations will be recorded.

### **10.4.3 Total Particulate Action Levels**

If the ambient 15-minute average air concentration of particulate at any one (or more) of the downwind perimeter locations is noted at levels in excess of 100 micrograms per cubic meter (ug/m3) above the background concentration, or if airborne dust is visually observed leaving the work area, then dust suppression techniques will be implemented, and air monitoring will

continue. Work may continue following the implementation of dust-suppression techniques provided the particulate levels do not exceed 150 ug/m3 above background.

If, after implementation of dust-suppression techniques, the downwind particulate levels are greater than 150 ug/m3 above background, work must be stopped and site activities must be reevaluated. Once additional actions have been implemented, work may resume only if dust-suppression measures and other controls are successful in reducing the 15-minute average particulate levels to less than 150 ug/m3 above background at the downwind perimeter of the site and if no visible dust is observed leaving the Site.

#### 10.4.4 VOC Action Level

If the ambient air concentration of total VOCs at the downwind perimeter locations exceeds 5 ppm above the background (upwind location) concentrations for the 15-minute average, intrusive site activities will be temporarily halted while engineering controls are implemented to reduce VOC levels below 5 ppm.

Contaminant	Monitoring Location	Action Level	Control Action
Total Particulate	Site Perimeter	> 100 ug/m <sup>3</sup> above background or Visible emissions	Implement dust suppression, continue monitoring
		$> 150 \text{ ug/m}^3$ above background	Stop operations, revaluate work, implement additional controls
			Resume work if controls successful in reducing particulate < 150 ug/m <sup>3</sup> above background
Total Organic Vapors	Site Perimeter	<5 ppm above background	Continue Work, Continue Monitoring
		> 5 ppm above background	Halt operations, continue monitoring, evaluate source of VOC, take corrective measures to reduce VOC concentration

### **Table 10-3 Summary of Perimeter Action Levels**

< - Less Than

> - Greater than

#### **10.4.5 Data Collection and Reporting**

Air monitoring data will be collected continuously by the electronic data-logging system. The data management software will be set up so that instantaneous observed readings will be recorded by the electronic data acquisition system and averaged over 15-minute periods (including meteorological data). The HSO will obtain manual readings on a periodic basis throughout the day.

A daily report will be generated showing minimum, maximum and average results for each monitor, a summary of the 15 minute average readings and a map showing sample locations,. The data will also be presented graphically showing concentrations over the course of the work day.

All readings will be recorded and archived for review by NYSDOH and NYSDEC personnel (if necessary).

Documentation sample results will be maintain on-site for review by NYSDOH and NYSDEC personnel.

### 11. Decontamination

It is the responsibility of the SSO to ensure all personnel and equipment leaving the site are properly decontaminated. Decontamination is essential to ensure contamination does not migrate offsite on employees and equipment. Proper decontamination also protects support zone and offsite personnel from exposure to hazardous materials.

#### 11.1 Contamination Prevention

One of the most important aspects of decontamination is preventing unnecessary contamination while working onsite. Effective contamination prevention practices will eliminate unnecessary contamination and aid in the decontamination process. The following are general contamination prevention techniques and should be followed while working onsite:

- Avoid walking through areas of obvious or known contamination unless you are working directly in that area,
- Minimize contact with contaminated material,
- Minimize contact with unknown materials,
- Fasten all closures on suits, covering with tape if necessary,

#### 11.2 Personal Decontamination

A personal decontamination facility will be established in the contaminate reduction zone, adjacent to the exclusion zone. Decontamination procedures shall be followed by all personnel exiting the contaminate reduction zone. Under no circumstances, other than emergency response, will personnel be allowed to leave the site before decontamination.

All disposable PPE shall be removed before meal breaks and at the conclusion of the workday and replaced with new PPE before commencing work. In addition, respirator cartridges, if needed, will be changed at the beginning of each day, and at any other time breakthrough is detected. Contaminated clothing will be placed in designated containers in the contaminate reduction zone. Respiratory and other non-disposable PPE (boots, glasses, hard hats) will be fully decontaminated and placed in a clean storage area.

The following decontamination procedure will be used for Modified Level D and Level C (if necessary). Decontamination procedures for higher levels of protection will be provided if required:

- 1. Deposit equipment used on site on plastic drop cloths or in designated containers with plastic liners,
- 2. Scrub over boots and outer gloves with decontamination solution (soap/detergent),
- 3. Rinse off decontamination solution with clean water,

- 4. Remove reusable over boots, clean, place in clean storage
- 5. Remove disposable outer gloves and deposit in disposal containers with plastic liner
- 6. Remove coveralls and dispose,
- 7. Remove inner glove and deposit in disposal container with plastic liner,
- 8. Remove respirator, clean, sanitize and place in clean storage.

### 11.3 Equipment Decontamination

#### 11.3.1 Small Equipment / Hand Tools

Contaminated hand tools and small equipment shall be decontaminated by:

- 1. Monitoring equipment will be wiped down with a disposable paper wipe,
- 2. Washing hand tools with decontamination solution (soap/detergent) and rinsing with water.

### 11.3.2 Heavy Equipment

Heavy equipment will be visually inspected and decontaminated if necessary. Only those parts of the equipment that has been exposed to the contaminated materials need be decontaminated. The decontamination pad will be located in the contaminate reduction zone. Contaminated heavy equipment may include:

- 1. Cleaning all loose debris with a brush, broom or spade,
- 2. Rinsing equipment with water
- 3. High pressure washing and/or steam cleaning, if necessary

Upon completion of the project, the decontamination area will be cleaned.

All personnel performing equipment decontamination shall do so wearing modified Level D protection. Decontamination water will be contained and disposed of off-site.

### 11.4 Emergency Decontamination

Whenever possible, personnel should be decontaminated before administering first-aid. The decision to decontaminate must be weighed against the severity of the injured persons.

## **12. Accident Prevention Plan**

A vital element of any Health and Safety Program is accident and exposure prevention. It is essential that the contents of the Health and Safety Plan are communicated to, and understood by, all that work at Mohasco Mills Complex. There are four elements to preventing accidents and over exposures;

- Educate personnel as to the requirements of the Health and Safety Plan,
- Eliminate unsafe conditions identify and correct conditions that can contribute to an accident and limit exposure to these conditions,
- Reduce unsafe acts personnel must make a conscious effort to work safely. Management must enforce safety regulations,
- Inspect frequently regular safety inspections of the work site, materials and equipment by qualified persons ensures early detection and correction of unsafe conditions.

The following guidelines describe specific measures personnel will take to minimize the occurrences of accidents onsite:

- Use the buddy system for all onsite work.
- Suspend work and reevaluate the hazard and level of PPE required upon the discovery of any situation more hazardous than anticipated.
- Bring to the attention of the Project Health and Safety Manager or Site Safety and Health Officer immediately any potentially unsafe condition or work practice.
- Do not wear contact lenses onsite.
- Conduct site activities only with sufficient lighting.
- Use toilets provided onsite for personal needs.
- Do not bring drugs, alcohol or weapons on site.
- Do not attempt to work onsite if under the influence of illegal drugs or alcohol.
- If taking over-the-counter drugs within a day before working on site inform the Site Safety and Health Officer of any warnings on the drug's label.
- Do not fight or horseplay onsite.
- Personal visitors are not allowed onsite.

- Maintain personal property in a clean and safe manner; keep work area free of liter and obstruction.
- Wash hands and face upon leaving the work area and before eating, drinking or other activities.
- Do not work in the area of odors without appropriate PPE.
- Post hazardous work and noise signs as necessary.

### 13. Emergency Response

In the event of an accident or emergency, immediate action must be taken by the first person to recognize the emergency. Onsite personnel will use the following emergency procedures. The HSO must be notified of any onsite emergency. In cases involving serious personal injury, fire or explosion, the HSO shall notify the proper authorities (see Table 14-1 for emergency phone numbers).

During an emergency the HSO will assume command of the situation, with all employees reporting to him. If the cause of the injury, or absence of the injured person, does not affect the performance of site personnel, operations may continue. If the injury increases the risk to others the designated emergency signal, three (3) long blasts on an air horn, shall be sounded and site personnel shall evacuate. Activities shall not resume until the risk is evaluated and removed.

Emergency/Medical Resource	Phone Number/Mobile
Site Safety Supervisor (B. Cooley)	607-972-7192 (mobile)
Bianchi PM (B. Bianchi)	315-453-0001
Health & Safety Coordinator (T. O'Rourke)	607-427-4714
Bianchi Site Superintendent (F. Kreller)	315-575-1975
-	
Amsterdam Police	911
New York State Police	911
Amsterdam Fire Company	911
Ambulance	911
St. Mary's Hospital	518-842-1900
NYSDOH	800-458-1158
Poison Control Center	800-222-1222
NYSDEC Spill Hotline	800-457-7362
USEPA - Spill Response	1-800-457-7362

#### **Table 13-1- Emergency Phone Numbers**

#### **13.1.1 Emergency Equipment**

In order to provide emergency assistance to sick or injured workers, the following supplies and equipment will be available at each work site:

- Portable emergency eyewash,
- Potable water or Gatorade (1 to 2 gallons per person per day),
- First Aid kit containing supplies for initial treatment of minor cuts and abrasions, chemical/acid burns, snake and insect bites, and for immobilization of fractures. To prevent exposure to blood borne pathogens, the First Aid kit will also include disposable gloves, aprons/gowns, and eye shields and face masks to shield eyes, nose and mouth from splashes,
- ABC-type dry chemical fire extinguishers,

All emergency equipment will be located near the decontamination area in the Contaminate Reduction Zone.

#### 13.1.2 Contingency / Evacuation Plan

Although improbable, it is possible that site emergency could necessitate evacuating all personnel from the site. If such a situation develops, the HSO shall give the evacuation signal, 3 long blasts of an air horn. Upon notification, all personnel shall evacuate the site in an orderly fashion and regroup at the site trailer. The route of evacuation will depend on the severity of the accident, wind direction (as visually determined) and proximity to the accident. Each employee shall find the safest route to the site trailer. All personnel shall wait at the site trailer for further instruction. No employee shall leave the site until the emergency is under control and approval to leave is given by the HSO.

In situations, when an onsite emergency results in evacuation of the site, personnel shall not reenter until:

- The condition resulting in the emergency has been corrected.
- The hazards have been reassessed.
- The Site-Specific Health and Safety Plan has been reviewed.
- Site personnel have been briefed on any changes to the Site-Specific Health and Safety Plan.
- The HSO has been reviewed the situation that resulted in the evacuation.

### **13.1.3** Procedure for Injury

The following procedure shall be followed for site injuries:

1. Telephone for ambulance / medical assistance, (911) if necessary. To the extent possible, notify the medical facility of the nature of the physical injury or chemical exposure. If

employee goes to the hospital, send a copy of this Site-Specific Health and Safety Plan with him.

- 2. Evaluate the situation to determine if the hazard, which injured the first employee, still exists. If so, measures must be taken to eliminate the hazard before entering the area or administering first aid.
- 3. If the injury is minor, administer first aid.
- 4. Complete the injury report; submit to the Health and Safety Manager.

### 13.1.4 Procedure for Chemical Exposure

If a member of the field crew demonstrates symptoms of chemical exposure, the following procedure shall be followed:

- 1. Another team member (buddy) shall remove the individual from the immediate area of contamination. The buddy should notify the HSO of the accident or emergency.
- 2. Precautions should be taken to avoid exposure to other individuals.
- 3. If the individuals' clothing is contaminated, precede with emergency decontamination procedures.
- 4. If the chemical has contacted the skin, the skin should be washed with copious amounts of soap and water.
- 5. In case of eye contact, the eyes should be washed with water for at least 15 minutes.
- 6. Telephone for ambulance / medical assistance, (911) if necessary. To the extent possible, notify the medical facility of the nature of the physical injury or chemical exposure. If employee goes to the hospital, send a copy of this Site-Specific Health and Safety Plan with him.
- 7. Complete the injury report; submit to the Health and Safety Manager.

### **13.1.5** Procedure for Fire or Explosion

In the case of fire or explosion the following procedure shall be followed:

- 1. Upon notification of fire or explosion, the HSO shall evacuate the site, per the site evacuation plan.
- 2. Attempt to extinguish fire using fire extinguisher, if safe to do so.
- 3. Summon local fire department, if necessary.
- 4. Work may not resume until:
  - The condition resulting in the emergency has been corrected.

- The hazards have been reassessed.
- The Site-Specific Health and Safety Plan has been reviewed.
- Site personnel have been briefed on any changes to the Site-Specific Health and Safety Plan.

#### **13.1.6 Procedure for Near Miss**

Near miss incidents are those in which no injury or property damage occurred, but under slightly different circumstances an injury or property damage could have occurred. Near misses will be investigated in the same manner as injuries. An accident investigation form will be completed, focusing on root cause and prevention. All site employees will be informed of the results of the investigation and any resulting changes to work procedures.

#### 13.1.7 Route to Hospital

Route to the hospital will be posted in the site office trailers. A copy is also include in the attachments.

#### 13.2 Emergency Equipment

In order to provide emergency assistance to sick or injured workers, the following supplies and equipment will be available at each work site:

- Portable emergency eyewash, located in the Bianchi site office trailer.
- The shower in the decontamination trailer will be used for an emergency shower if necessary.
- First Aid kit containing supplies for initial treatment of minor cuts and abrasions, chemical/acid burns, snake and insect bites, and for immobilization of fractures. To prevent exposure to blood borne pathogens, the First Aid kit will also include disposable gloves, aprons/gowns, and eye shields and face masks to shield eyes, nose and mouth from splashes,
- ABC-type dry chemical fire extinguishers,

All emergency equipment will be located in the Bianchi site office trailer.

## 14. Logs, Reports, and Record keeping

The Site Safety and Health Officer will maintain the following logs and reports onsite during the duration of this project:

- Employee training records,
- Employee medical surveillance written opinion records,
- Daily safety meeting minutes and sign-in sheets,
- Accident investigation records, if necessary,
- Site entry and exit log,
- Air monitoring results and data sheets,
- Daily safety log.

## **ATTACHMENTS**

### **Pre-entry Briefing / Safety Compliance**

Revised June 1998

Each employee, and subcontractor, conducting fieldwork will sign this form after the pre-entry briefing is competed and prior to starting work on site.

#### **Employee Sign Off**

I have attended a pre-entry briefing outlining the specific health and safety provisions on this site. I have read and will comply with the provisions contained in this Site-Specific Health and Safety Plan.

Employee Name	Signature	Date

\*\* A Record of pre-entry briefings will be kept on site at all times.

## Daily Tool Box Safety Meeting Sign-in Sheet

Contractor: Presenter: Safety Topic(s) Covered:	
Presenter:Safety Topic(s) Covered:	
Safety Topic(s) Covered:	

Employee Name	Signature

# Entry / Exit Log Revised June 1998

Project Name	
Project Location	
Date	

	Name	Company	Time In	Time Out	Reason
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

### Air Monitoring Log Dust & PID

Date		Technician					
PID Calibration? Y / N			Work Activities				
Dustrack Calibration? Y / N		Temperature PID					
Time	Upwind	Downwind 1	Downwind 2	Downwind 3	PID	Notes	
7:00							
8:00							
9:00							
10:00							
11:00							
12:00							
13:00							
14:00							
15:00							
16:00							
17:00							
18:00							
19:00							
Notes							

### **Qualitative Fit Test**

Revised March 2001

Employee Name:			
Social Security #:			
Company:			
Respirator Brand:			
Model:	Size:		
Procedure: Saccharin	Banana Oil	Bitrex	

Note: Failure in any one of the following exercises indicates unacceptable fit.

- 1. \_\_\_\_\_ Breath normally
- 2. \_\_\_\_ Breath Deeply
- 3. \_\_\_\_Turn head side to side
- 4. \_\_\_\_\_ Move head up and down
- 5. \_\_\_\_\_ Talking (read the following out loud)

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When man looks for something beyond his reach, his friends say he is looking for the pot of gold at the end of the rainbow.

- 6. \_\_\_\_ Grimace
- 7. \_\_\_\_\_ Bending Over
- 8. \_\_\_\_\_ Breath normally

Test performed by:

Employee Signature:

\_\_\_\_\_ Date: \_\_\_\_\_

#### Hot Work Permit

Permit Valid	From Date:	Ti	ime:	To Date:		Time:	
Location Descrip	tion:						
Type of Hot Wor	k: 🗆 Soldering	U Welding	□ Cutting	□ Roofing	□ Other _		

<u>Hot Work Precautions Check List:</u> Complete prior to any hot work beginning in any area, including outdoors. Check each box where the statement is true. If any statements are not true, then hot work should not begin until that issue has been safely resolved.

#### **Required Safety Precautions:**

- □ Fire suppression sprinklers, fire hoses or fire extinguishers (minimum 2-A:20-B:C) rating are available and operable.
- $\hfill\square$  Hot work equipment is operable and in good repair.
- □ Smoke/fire detectors in the immediate area of the hot work have been temporarily disabled until the hot work is complete.
- □ Building occupants have been protected or isolated from the hot work area.
- □ Drums, barrels and tanks have been cleaned and purged of flammables and toxics, all tank feeds are closed, and the tank is vented.
- $\Box$  Work area is NOT a Confined Space.

#### Requirements within 35 feet when flame, sparks or slag are created:

- □ Area within 35 feet of the work area has been properly swept to remove any combustible debris.
- □ Flammable and ignitable materials and debris have been moved at least 35 feet from the hot work area or covered and protected with fire resistant materials.
- □ Cracks or holes in floors, walls and ceilings (including ductwork) are covered or plugged.
- $\hfill\square$  Combustible construction covered with fire-resistive material.

#### Requirements within 50 feet when flame, sparks, or slag are created:

 $\Box$  Explosives, compressed gas cylinders or stored fuel have been moved at least 50 feet from the hot work area or have been protected from the hot work.

#### Work on walls or ceilings:

- □ Construction is noncombustible and has no combustible covering or insulation.
- □ Areas adjacent to walls being worked on are checked for combustibles and any combustibles are either removed or protected.

Fire	Watch required during Hot	Work and a	a minimum of 30 minutes following completion of work.
Yes	No	Name:	

I verify that the above location has been examined and the necessary precautions have been taken to prevent the outbreak of fire due to Hot Work.

Employee Signature:	Date:	Time:
---------------------	-------	-------

Job	Project		
Hazard	Task		
Analysis	Analyzed By	Department	
	Date	Page	

Principal Steps	Potential Safety & Health Hazards	Recommended Controls / PPE		
Equipment To Be Used:				
Inspection Requirements:				
Training Requirements:				

## Route to St. Mary's Hospital

- Start out going SOUTHWEST on LYON ST toward FOREST AVE
- Turn LEFT onto LOCUST AVE / CR-14. Continue to follow CR-14
- Turn RIGHT onto CHURCH ST / NY-67 W. Continue to follow NY-67 W.
- Turn RIGHT onto NY-5 W / NY-67 W.
- Turn RIGHT onto STEADWELL AVE / CR-19.
- Turn LEFT onto GUY PARK AVE
- End at 427 Guy Park Ave

Appendix 1 – Resume

#### TIMOTHY M. O'ROURKE, CIH

#### **CERTIFICATION / LICENCES:**

Certified Industrial Hygienist - Comprehensive Practice - American Board of Industrial Hygiene - Certificate Number 6236.

NYS Licensed Asbestos Building Inspector

NYS Licensed Asbestos Contractor Supervisor

#### **AFFILIATIONS**:

American Academy of Industrial Hygiene

American Industrial Hygiene Association

American Society of Safety Engineers

#### **EDUCATION**:

Bachelor of Science in Industrial Hygiene and Environmental Toxicology.

Clarkson University, Potsdam, NY

#### **PROFESSIONAL COURSEWORK:**

- Asbestos Abatement Contractors and Supervisors
- Asbestos Abatement Building Inspector
- 40-Hour Hazardous Waste Operations and Emergency Response
- 8-Hour HAZZWOPPER Refreshers, as required
- Management of Hazardous Waste
- Sampling and Analysis of Hazardous Air Pollutants
- Comprehensive Industrial Hygiene Review
- Chemistry & Toxicology of Petroleum Hydrocarbon
- Art of IH Management
- Applied Ergonomics

- Managing H&S at Multiemployer Worksites
- Integrated Management of Environmental, Safety and Heath Programs
- Health Risk Assessments
- Developing Action Levels to Protect Hazardous Waste Site Workers
- OSHA 500 Authorized OSHA Construction Safety Outreach Trainer
- Laboratory Quality Assurance and Quality Control
- Fall Protection
- Conducting EH&S Audits
- Dale Carnegie Course
- Dale Carnegie Management Seminar

### **PROFESSIONAL HISTORY:**

Mr. O'Rourke has held both industrial and consulting positions. Before starting O'Rourke Incorporated, Mr. O'Rourke was employed as Manager of Industrial Hygiene and Air Quality Services by Upstate Laboratories, Inc., Syracuse, NY. In this position, Mr. O'Rourke was responsible for department and project management, report writing, equipment, laboratory coordination and new business development. Mr. O'Rourke routinely performed industrial hygiene sampling and stack testing. Before Upstate Laboratories, Inc., Mr. O'Rourke was employed at Corning, Inc. as an Industrial Hygienist / Environmental Control Engineer. While at Corning, Inc., Mr. O'Rourke was responsible for industrial hygiene and environmental compliance, including environmental reporting and permits, waste water treatment operations, air and noise monitoring and training.

### **EXPERIENCE SUMMARY**:

Mr. O'Rourke has over 17 years of diverse industrial and consulting experience in the development and management of environmental and industrial hygiene programs. Areas of key experience include air monitoring, hazardous waste site and construction safety, OSHA compliance programs, indoor air quality assessments, analytical chemistry, ambient air quality monitoring and project management.

### **REPRESENTATIVE PROJECTS:**

The following projects have been completed under Mr. O'Rourke's direction.

#### Hazardous Waste Site and Demolition Experience

- Developed and reviewed numerous Health and Safety Plans for hazardous waste remediation projects
- Instructor of 40 hour Hazardous Waste Operations Safety and Health Course.
- Instructor of 8 hour Hazardous Waste Operations Safety and Health Refresher Course.
- Instructor of 24 Hour Hazardous Waste Operations Safety and Health Course
- Served as Health and Safety Manager for numerous hazardous waste remediation and demolition projects. Contaminates of concern include PCBs, VOCs, SVOCs, PAHs, Metals, DDT, Dioxin / Furans, and petroleum products. Responsibilities varied, but included; Development Site-Specific Health and Safety Plans and Laboratory Sampling and Analysis Plan, site health and safety audits, implementing air monitoring programs, review of air monitoring data, management of Site Safety Officer, coordination of laboratory analysis, and preparation of data usability reports. Sites Include:
  - Stuart Oliver Holtz, Asbestos abatement, contaminated water & soil disposal, building demolition, NYSDEC, Rochester, NY.
  - Former Dinaburg Distributing, Contaminated soil removal, installation of soil vapor recovery system, NYSDEC, Rochester, NY.
  - Former Endicott Johnson Shoe, Hazardous waste disposal, PCB containing equipment & transformer disposal, building demolition, Johnson City, NY.
  - Pharmhouse Plaza, Building demolition, Elmira, NY.
  - Bath Opera House, Building demolition, Bath, NY.
  - Building 49/51, Building decontamination and demolition, Kodak Park, Rochester, NY.
  - Multiple contracts at Griffiss Air Force Base, Rome, NY. Contaminated soil removal, landfill closure, long-term monitoring. (1996-2005)
  - o Former Manufactured Gas Plant, Contaminated soil removal, Oneida, NY
  - Velsicol Chemical, river dewatering and sediment removal, MIDEP & EPA, St. Louis, MI. (1999 – 2005)
  - Cordova Chemical, contaminated soil removal and building demolition, MIDEP, Muskegon, MI.
  - Alcoa Road Bridge, bridge replacement in superfund classified river, NYSDOT, Massena, NY.
  - Route 26 Culvert Replacements, bridge replacements in petroleum contaminated soil, NYSDOT, Carthage, NY.

- Tioga Castings Facility, contaminated soil removal and building demolition NYSDEC, Owego, NY.
- o Oswego Castings, PCB contaminated soil removal, NYSDEC, Oswego, NY.
- Interim Remedial Action at Former Griffiss Air Force Base, contaminated soil removal, USACE, Rome, NY.
- GCL Tie and Treating Site, thermal treatment of creosote contaminated soil, USACE, Sidney, NY.
- Columbia Mills Landfill Closure, NYSDEC, Mineto, NY.
- o City of Johnstown Landfill Closure. NYSDEC, Johnstown, NY
- o Private, Petroleum contaminated soil removal project, Herkimer, NY.
- City of Buffalo, PCB remediation, Buffalo, NY
- Fort Edward Landfill Closure, NYSDEC, Fort Edward, NY.
- US Army Supply Depot, building demolition, Philadelphia, PA.
- Philadelphia Public Housing Authority, Martin Luther King Housing Project demolition by implosion, Philadelphia, PA.
- Continental Steel, multiple building demolitions and site remediation, INDEP, Kokomo, IN.
- o City of Geneva, warehouse demolition, Geneva, NY
- o Bayer Chemical, select process & building demolition, New Martinsville, WV

#### Construction Safety

• Served as Site Safety Manger during the construction a \$30 million student housing complex in Vestal, NY. Responsibilities included development of H&S Program, preconstruction safety conferences with subcontractors, employee orientations, management of Site Safety Director, Work included asbestos abatement and demolition of existing structures, site work, utilities, framing, roofing, plumbing, electrical, and finishing work.

#### Environmental Site / Asbestos Building Assessments

- Performed numerous Phase I Environmental Site Assessments according to ASTM Method E 1527-00. Properties include shopping plazas, gas stations, car washes, auto body shop, residences, farms, retail property and warehouses. Clients include banks, individuals, businesses and real estate management firms.
- Performed Phase II Site Assessments according to ASTM standards. Properties include shopping plazas, gas stations, car washes and residences.

• Performed numerous Asbestos Building Inspections according to NYS Code Rule 56. Buildings include homes, commercial / retail property, NYS State Park facilities and industrial facilities.

#### Ambient Air Quality

- Collected and analyzed samples for TSP, PM10, heavy metals, volatile organics (TO-14), PCBs (TO-4), PNAs (TO-13), volatile mercury and nitrosodiphenylamine. 24 hour samples were collected at ten locations, every other day. Performed onsite instrument calibrations, documentation and record keeping. Monitored and recorded meteorological data, including temperature, wind speed, wind direction and barometric pressure. Developed Analytical SOPs and QA/QC manual.
- Performed perimeter air monitoring program for VOCs (EPA TO2), SVOCs (ASTM 4861), Pesticides and PCBs (ASTM 4861) and Dioxin & Furans (EPA TO9A). Operated meteorological station for wind speed and direction. Prepared final report detailing sampling, QA/QC and results.
- Performed perimeter and personal air monitoring during a lead contaminated soil remediation project. Operated meteorological station for wind speed and direction. Prepared final report detailing sampling and sampling procedures and results.
- Performed numerous site perimeter air monitoring programs during hazardous waste site remediation projects in accordance with NYSDEC and NYSDOH procedures. Parameters monitored include total dust, respirable dust, volatile organic compounds, heavy metals, PCBs and PNAs.

### Indoor Air Quality

- Conducted numerous indoor quality investigations. Investigations included identifying pollutant sources, pathways, HVAC and how occupant use affected indoor air quality. Made appropriate recommendations to improve indoor air quality. Has conducted investigations in schools, commercial buildings, office buildings, landfill offices and office areas in manufacturing facilities.
- Performed mold inspections, including bulk, surface, and air sampling at residential, commercial and school facilities.

### Industrial Hygiene

- Performed numerous lead assessments during building and bridge demolition projects. Conducted lead training.
- Performed air monitoring and provided safety services during lead remediation projects at public housing authority.
- Performed numerous chemical exposure surveys and air sampling projects for organics, metals, acids, particulates and others. Prepared final reports to OSHA satisfaction.

- Served as project manager during an industrial accident cleanup. Coordinated 24 hour, 7 day a week, sampling and analytical services to document the extent of contamination and effectiveness of the cleanup. Performed personal and area air sampling for employee safety and health concerns
- Performed noise surveys and prepared corresponding reports at various industrial facilities.

#### OSHA Program Work

- Developed Corporate Health and Safety Programs for construction and demolition contractors. These programs included administrative procedures as well as specific work procedures for numerous construction tasks.
- Developed confined space entry program for multi-facility municipal recycling operation. Performed hazard assessment, developed written program and wrote entry procedures for 35 confined spaces.
- Developed confined space entry program for environmental laboratory field personnel.
- Developed respirator program for environmental laboratory field personnel. Conducted PPE training class.
- Developed and implemented Respirator Program, including training, for auto body shop technicians.
- Performed ventilation survey for electroplating operation. Performed necessary measurements and prepared report to document compliance with OSHA ventilation standards.
- Performed ventilation survey for liquid mercury operations. Performed measurements as necessary to compare current performance verses original design. Made design recommendations to increase system performance and reduce employee exposure below the OSHA PEL.
- Performed health and safety audit of an analytical laboratory.
- Performed health & safety training courses, including:
  - Hazardous Waste Operation & Emergency Response (all)
  - Lead in Construction
  - Trenching & Excavation
  - o 10 Hour OSHA Construction Outreach Safety Program
  - Fork Lift Operation
  - Fall Protection
  - Asbestos Awareness
  - PPE & Respiratory Protection

- o Hearing Conservation
- o Lock out / Tag out
- o Electrical Safety
- o Scaffolds

### **Bruce Cooley**

#### **CERTIFICATIONS:**

• NYS Emergency Medical Technician (retired)

#### **PROFESSIONAL COURSEWORK:**

- 40-Hour Hazardous Waste Operations and Emergency Response, Safety Systems & Solutions, Inc.
- 10 OSHA Construction Safety Course, Quality Environmental Services
- Confined Space Entry, Quality Environmental Services
- Hazardous Materials Waste Handling Course, US Dept. of Defense
- Transportation of Hazardous Materials, US Dept. of Transportation
- Health and Safety at Hazardous Waste Sites, Seneca Army Depot
- Radiological Team Training, Seneca Army Depot
- Depleted Uranium, Seneca Army Depot

#### EXPERIENCE

Mr. Cooley began his environmental career at the Seneca Army Depot in Romulus New York where he worked for 20 years. While employed at the Depot, Mr. Cooley served on both the hazardous waste and radiation response teams. His experience included initial entry, inspection, sampling and remedial work of chemical and radiological site utilizing Levels D-A of protection. Mr. Cooley was also a member of the HAZMAT emergency response team responding to chemical, radiological and explosives emergencies.

Before joining O'Rourke Incorporated, Mr. Cooley worked 1 year for an environmental consultant where he instructed various health and safety courses and conducted construction site safety audits. Training included Hazardous Waste Operations, Hazardous Material Technician, Incident Commander and Confined Space. In 2001 and 2002, Mr. Cooley served as the Site Safety Director during construction of a \$95 million dollar paper mill in Solvay, NY. Mr. Cooley oversaw all safety aspects of plant construction, including extensive excavation required for the foundations. Up to 300 tradesmen were employed during the project.

### **REPRESENTATIVE PROJECTS:**

Mr. Cooley has completed the following projects:

• Served as Site Safety Director during the construction a \$30 million student housing complex in Vestal, NY. Responsibilities include preconstruction safety conferences with subcontractors, employee orientations, daily workplace inspections, implementation of

drug, alcohol and discipline policy, and coordination of safety issues between all subcontractor trades. Work included asbestos abatement and demolition of existing structures, site work, utilities, framing, roofing, plumbing, electrical, and finishing work.

- Served as Site Safety Officer for demolition project at Kodak Park, Rochester, NY. Work involved select demolition of process piping and equipment containing residual nitrocellulose (shock sensitive). Work was completed without incident.
- Served as Site Safety Officer for Remedial Action at Velsicol / Pine River Remediation, St. Louis, Michigan during 2004. Performed all required Site Safety Officer duties including development, implementation, enforcement, and monitoring of the Site-Specific Health and Safety Plan, pre-construction indoctrination and periodic training of all on-site personnel. Responsibilities included conducting safety audits, coordinating the upgrading or downgrading of PPE based on air monitoring results, monitoring the compliance of field personnel to the routine and proper use of PPE prescribed for each task, inspecting PPE, ensuring all site personnel have received the required OSHA site specific training, ensuring all site workers have current medical surveillance records as required by the Site-Specific Health and Safety Plan, performing site air monitoring and maintaining a site safety log to record air monitoring results and other health and safety related information.
- Served as Site Safety Officer, Endicott Johnson Facility environmental remediation project, Johnson City, NY. Scope of work included Building demolition, concrete crushing contaminated soil excavation, waste disposal, transformer disposal and site restoration.
- Served as Site Safety Director during the construction a \$95 million paper mill in Solvay, NY. Responsibilities included all aspects of site safety, including; demolition, site excavation, excavation of unexpected drums (Level A Response), trenching operations, fall protection, air monitoring for confined space entry (manholes, trenches, sewers, roller drums), carbon monoxide monitoring for personal exposures, conducting bi-weekly safety meetings, served as safety representative at project meetings. Assured compliance with OSHA regulations. Inspected by OSHA 4 times during project, no serious citations issued.
- Completed remediation of numerous chemical sites at Seneca Army Depot. Responsibilities included initial site entry and characterization, excavation of contaminated soils, design and operation of equipment and personal decontamination facilities.
- Completed remediation of numerous low level radiation sites at Seneca Army Depot. Responsibilities included inspection of materials and containers containing depleted uranium, excavation of contaminated soils, design and operation of equipment and personal decontamination facility.

- Served as member of both the HAZMAT emergency response and Radiological Assistance teams at Seneca Army Depot and responded to approximately 200 releases of hazardous materials, including explosives and unexploded ordinances.
- Designed and assisted in the construction of fuel oil containment areas for the Seneca Army Depot.
- Designed and assisted in construction of fuel oil / water separation systems for the Seneca Armey Depot.
- Completed limited maintenance activities on items and equipment containing depleted uranium.
- Instructor of initial and refresher Hazardous Waste Operations and Emergency Response Courses and confined space entry conducted using hands on exercises.

## Appendix 2 – Engineering Survey

(To be Inserted Once Complete)

Appendix 3 – Asbestos Abatement Plan

## Bianchi Industrial Services, LLC Asbestos Abatement Plan Mohasco Mills – Amsterdam, New York

## Building 20A – Asbestos Abatement Plan

This building was constructed in the early 1900's and is made up of steel, timber and brick. Over the years the building has dilapidated severely making the manual removal of asbestos unsafe. Therefore, Bianchi Industrial Services, LLC, utilizing its subcontractor, Environmental Safety and Control LLC, will perform the asbestos abatement according to the new revised Industrial Code Rule 56 Section 56-11.5 "Controlled Demolition with Asbestos in Place". Proper notification of NYSDOL will be made 10 days prior to beginning demolition operations. Bianchi Industrial Services, LLC will obtain a condemnation letter from a licensed Professional Engineer. A copy will be provided to ENSR Prior to Demolition. Prior to the mechanical demolition, Bianchi Industrial Services, LLC will manually remove three to four bays of Building 20A with the use of aerial lifts so that when mechanical demolition is performed the adjacent building known as "Dzieck Plumbers Building" will be safely away from the fall zone. (See Bianchi Industrial Services, LLC demolition work plan – Building 20A). The workers that will be performing this work will be NYS Asbestos Certified Handlers.

## The basic setup will be as follows:

- A remote decon or decon trailer will be set up within close proximately of Building 20A (See site schematic, attached)
- All workers within the work zone will don personnel protective equipment for asbestos
- Orange construction fence delineating the asbestos abatement work area will be set up within 25 feet of the building.
- A dedicated exit and entrance area will be provided
- Anyone within the orange fencing will need to be NYS Asbestos Certified.
- Operating Engineers will be NYS Licensed Asbestos Handlers
- Truck Drivers will remain in their vehicles with the ventilation systems off during loading. They will not be required to be NYS Asbestos Certified.
- All containers will be doubled lined with 6mil fire retardant sheeting prior to loading.
- All steel, timbers, or other building components that may be separated from ACM will be recycled or reused.
- Once final clearance samples have been achieved, less than .01 FCC's or less than background samples, the area will be reopened as a nonasbestos work zone.

# Building 36 – Asbestos Abatement Plan

Building 36 is a six story re-enforced concrete structure, vary sound. However, over the years the building has been without heat or any other utilities. The interior of the building has been severely damaged by snow, ice and rain. Bianchi Industrial Services, LLC's approach will be to remove all interior moveable objects, walls or other debris as construction and demolition debris without disturbing any asbestos. The removal of all lights, ballasts and transformers will performed. The building will then be set up in full controls for asbestos abatement. Each floor will be its own work zone and cleared independently. Each floor will have an airlock attached to the main stairwell which will exit to a decontamination trailer or decontamination unit. Set up next to the decon unit will be a material transfer station setup for large abatement projects. The building contains various asbestos containing material such as; transite, floor tile, mastic, pipe insulation and felts.

# The basic setup will be as follows:

- All workers will be NYS Certified Asbestos Handlers and don
   personnel protective equipment
- Critical barriers will be placed on all windows and openings.
- Negative air will be established with four air changes.
- Attached as mentioned above will be material transfer station and decon unit.
- Asbestos pipe insulation and fittings will be removed first utilizing abandoned pipe wrap and cut method of Industrial Code Rule 56 Section 56-11.8
- Once the friable asbestos has been abated, all non-friable removals will begin
- Once final air clearance has been achieved, the roof system will be removed.

- After the removal of the roof, BIS will remove all windows by pulling them inward or outward safely and disposing of such.
- Once final air clearance the building will be set for demolition by implosion or mechanical means.

# Building 7, 7A and 11 – Asbestos Abatement Work Plan

The above mentioned building was previously demolished to the first floor slab. The methodologies utilized for these buildings will be the same as above (Building 36).

# **Outdoor Debris Piles**

BIS will have NYS Certified Asbestos Handlers locate the debris piles shown in the documents and clean up by the following method.

- Workers will don personnel protective equipment utilizing two tyvek suits.
- Pile or piles of debris will be wetted and double bagged
- Bags will be deposited in disposal containers for final destination

# **Temporary Power**

Temporary power will be provided by a combination of pole and generator. Generators will be positioned outside the building and be properly grounded. All temporary wiring will be GCFI protected.

# **General Requirements for all Asbestos Work**

All work will be performed in accordance with the Site Specific Health and Safety Plan. BIS will implement a Hazard Communication Program and maintain copies of all MSDS on-site. The Health and Safety Plan includes emergency procedures to alert employees in the work area to a fire and / or emergency.

Asbestos waste will be disposed of at High Acres Landfill, located at 425 Perinton Parkway, Fairport, NY 14450.



Site Layout

Appendix 4 – Demolition Plan

# Bianchi Industrial Services, LLC 300 Long Branch Rd. Syracuse, NY 13209 (315) 453-0001 / 453-0033 fax 800-DEMO-201 NATIONWIDE

# Demolition of 6-story Building 36 & 4-story Building 20A at the Former Mohasco Mills

# **Project Approach Outline**

## PRE-DEMOLITION / MOBILIZATION:

- **Bianchi Industrial Services LLC** will forward all required licenses and certifications to the owner, design professional and jurisdiction as necessary during the beginning stages which will negate the possibility of the project being held up due to lack appropriate approvals.
- **Bianchi Industrial Services LLC** will notify the New York State Department of Labor's Asbestos Control Bureau for the 10-day notifications and revised notifications to the US EPA.
- Our on site mobilization will consist of the arrival of our project superintendent who will set up all required site services, facilitate a safety meeting, survey the facility for the purpose of identifying necessary protection measures and verify that all services to the buildings have been or are in the process of being properly disconnected and or terminated.
- **Bianchi Industrial Services LLC** will utilize Lyon Street & Forest Avenue for access to the work area for our equipment, tools and supplies.
- Work will be completed in accordance with the Site Specific Health & Safety Plan, specifically Section 8.1 Demolition Operations.

#### <u>CREW – SITE SPECIFIC</u>

Our manpower plan will be as follows

- Project Manager
- Demolition Superintendent
- Equipment Operators (2 6)
- Demolition Laborers (2 6)

• Site Safety Officer

# EQUIPMENT

- PC450 Komatsu Ultra High Reach Hydraulic Excavator with Universal Processor (1)
- 100,000 lb Hydraulic Excavator with various attachments (2)
- JLG 60'-100' boom lift(s) (2)
- Komatsu 380 Demolition Rubber Tire Loader or equal (1)
- 70,000 lb Hydraulic Excavator with various attachments (1)
- Various Air Compressors and Welders

# PREPARATION OF WORK AREA:

- 1. The entire site will be fenced in utilizing the existing chain link fencing and panel fence supplied by **Bianchi Industrial Services LLC** that will designate the entrance and exit points from the site.
- 2. The demolition superintendent or designated representative will inspect the area for compliance with security requirements.
- 3. The site mechanic or operators will conduct machinery inspections.
- 4. **Bianchi Industrial Services LLC** superintendent will notify the local fire, police and ambulance services prior to the commencement of the mobilization activities. Bianchi will notify and coordinate any traffic closures with the City Engineer.
- 5. **Bianchi Industrial Services LLC** will install protection (plywood, tires, and hay bales) adjacent to Dzieck Plumbers Building.
- 6. All ingress and egress routes to the demolition area will be strictly controlled and enforced.
- 7. Local fire, police, hospitals, etc. will be posted at site trailer near the phone.

# General Description of the Work for Building 36:

**Bianchi Industrial Services LLC** will include all the labor, materials, tools and equipment necessary for the proper execution and completion of the demolition of the 6-story reinforced concrete building #36 at the former Mohasco Mills site in Amsterdam, New York. Asbestos abatement and Environmental Remediation will precede any demolition activities known to **Bianchi Industrial Services LLC**.

**Bianchi Industrial Services LLC** laborers will start by stripping out all combustible construction and demolition (C&D) debris without interfering with asbestos. This process will not compromise the structural integrity of the building while it will insure that all materials that are placed in fill areas are clean concrete as per specification

requirements.

Demolition of the reinforced concrete and brick 6-story building #36 will be performed utilizing our 450 Ultra High Reach (maximum reach 80') track excavator starting at the corner of the Lyon & Forest Avenue. The 450 Ultra High track excavator with be equipped with a concrete pulverizing attachment (UP 20) that will cut away the outer reinforced concrete and brick exterior walls starting from the top and working downwards to create an access to the structural members. The operator will then cut thru and pulverize the concrete column in sections, lowering the upper structure to the floor level. BIANCHI INDUSTRIAL SERVICES LLC will remove the bay closest to Lyon Street moving inward towards the creek.

This procedure would continue on a bay to bay process moving towards the creek. We will leave the last bays adjacent to creek for last. This process will be assisted by another operator utilizing 100,000 lb. track excavator (PC 400) equipped with a concrete pulverizing attachment (UP 50).

**Bianchi Industrial Services LLC** will bail (feed) the building materials that result from the demolition activities and stockpile them for backfill. **Bianchi Industrial Services LLC** will complete this building demolition down to the 1<sup>st</sup> Floor and leaving this floor intact.

#### General Description of the Work for Building 20A:

**Bianchi Industrial Services LLC** will include all the labor, materials, tools and equipment necessary for the proper execution and completion of the demolition of the 4-story wood, steel and brick building #20A at the former Mohasco Mills site in Amsterdam, New York. This building will be demolished under provisions of Applicable Variance (AV) 106 due to the structural un-soundness.

**Bianchi Industrial Services LLC** laborers will start by using lifts & laborers to remove bays that are in close proximity to Dzieck Plumbers Building. This is performed by **Bianchi Industrial Services LLC** laborers that are 100% tied off and in full personal protective equipment (PPE) using air hammers starting from the highest point (roof parapet). All C&D generated will be put inside of building 20A and bricks stockpile below.

Demolition of the wood, steel and brick 4-story building #20A will be performed utilizing our 450 Ultra High Reach (maximum reach 80') track excavator or 100,000 lb track excavator with a grapple starting in the far rear of the structure (previous footprint of demolished 20A). The 450 Ultra High track excavator with be equipped with a UP 20 or grapple that will cut away the outer brick exterior walls starting from the top and working downwards to create an access to the structural members. The operator will then cut thru the wood & steel columns in sections, lowering the upper structure to the floor level. **Bianchi Industrial Services LLC** will take great precautions so as to limit the amount of debris that fall into the Chuctanunda Creek.

This procedure would continue on a bay to bay process moving towards Forest Avenue. We will leave the last bays adjacent to creek for last so equipment operators can fold building away from the Chuctanunda Creek. This process will be assisted by another operator utilizing 100,000 lb. track excavator (PC 400) equipped with a grapple that will sort and segregate all C&D, and salvageable metals.

**Bianchi Industrial Services LLC** will bail (feed) the building materials (that stay on site) that result from the demolition activities and stockpile them for backfill. **Bianchi Industrial Services LLC** will complete this project by removing the basement walls to 2' below existing grade.

#### HEALTH AND RISK ASSESSMENT:

- 1. Objects falling from building or off ledges.
- 2. Dust and debris in eyes.
- 3. Slips and falls.
- 4. Burns from flame or splatter during torch cuts.
- 5. Cuts or laceration from handling steel or glass.
- 6. Falls from heights.
- 7. Foot injuries.
- 8. Asbestos
- 9. Lead Dust
- 10. Silica Dust

## **PREVENTATIVE MEASURES:**

- 1. Hard hats will be worn at all times.
- 2. Safety glasses or goggles will be worn at all times.
- 3. Walk areas will be kept clear.
- 4. Appropriate burn proof clothing, (eye, face, and hand) protection will be worn.
- 5. Heavy leather gloves will be worn when handling steel or working around broken glass.
- 6. Fall protection will be worn when working at elevated heights.
- 7. Steel toe work boots will be worn in demolition areas.
- 8. Proper personal protection equipment and respirators will be worn when appropriate.

#### **GENERAL REQUIREMENTS:**

This dust control plan addresses procedures, materials, and equipment to be utilized by **Bianchi Industrial Services LLC** to control dust generated during the execution of the work under this contract.

All dust control devices will be installed prior to demolition and other activities, which generate the potential for dust releases. The minimum acceptable level of performance of dust control will be that no visually noticeable dust generated by the project accumulates on adjoining properties, and neighboring streets.

#### **DUST CONTROL MEASURES:**

The contractor will provide dust control measures as needed throughout the duration of the project, and shall control migration of dust off-site due to on-site activities.

The project supervisor shall be responsible for visual dust monitoring and will monitor the surrounding work area for accidence level of dust. The supervisor shall also be responsible for ordering/implementing established dust control measures to prevent particulate migration.

Control measures will include, as deemed necessary by the project supervisor, water application "weather permitting" and adjustment to work procedures above certain wind velocities. In addition to the referenced measures our controlled collapse method is a primary method of dust control. Control measures will be sufficient to meet the requirements of the Air Monitoring Program located in the Site Specific Health and Safety Plan.

Noise will be controlled by utilizing properly maintained demolition equipment fitted with factory mufflers. Work will be limited to between 6am and 6pm.

#### WATER APPLICATION:

Water, supplied by the owner's source, will be applied to control dust generation during demolition and stockpiling operations. This will be accomplished by utilizing fire hoses and fog nozzles in the immediate work areas either placed on stanchions or manned by on-site personnel. The application rate will be controlled so as to prevent surface run-off and ponding of water.

Appendix 5 – Lead Compliance Plan

# LEAD COMPLIANCE PLAN Building Demolition and Site Remediation Mohasco Mills Complex City of Amsterdam, New York

Submitted by:

Bianchi Industrial Services, LLC 208 Longbranch Road Syracuse, New York

February 2006

Fred Kreller Site Supervisor

52L ١

Timothy O'Rourke, CIH Project Certified Industrial Hygienist

# Revision Summary

Revision No.	Revision Date	Description of Changes	Reason for Change
Original	February 13, 2006	Original Lead Exposure Compliance Plan	

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# 1. Purpose

The purpose of this document is to outline the procedures for controlling employee lead exposure and maintaining compliance with OSHA's Lead in Construction Standard, 29CFR1926.62, during demolition of structures at the Mohasco Mills Complex, Amsterdam, NY

Over the course of this project, it may be necessary to revise this plan in order to account for changing or unanticipated site conditions. Any revisions made to the Site-Specific Health and Safety Plan must be made in writing, approved by the CIH and noted in the Record of Revisions of this Lead Exposure Compliance Plan.

# 2. Definitions

Action Level- means employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air  $(30 \text{ ug/m}^3)$  calculated as an 8-hour time-weighted average (TWA). Employees whose exposure is above the Action Level for more than 30 days per year are required to be in a medical surveillance program.

Affected Employee- Any employee whose exposure is at or above the Action Level.

**CIH** – Certified Industrial Hygienist

**Competent person** - one who is capable of identifying existing and predictable lead hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.

**HEPA**- A High Efficiency Particulate Air Filter capable of filtering 0.3 micron particles with 99.97 percent efficiency.

**Lead**- Metallic lead, all inorganic lead compounds (e.g., laboratory reagents, solder), and organic lead soaps. All other organic lead compounds, such as tetraethyl lead, are excluded from this definition.

**Lead Paint**- Paint and / or primer containing detectable levels of lead.

**Medical Surveillance**- Consists of medical examinations as well as blood sampling for lead and zinc protoporphyrin, if applicable. Performed by or under the supervision of a physician.

**Permissible Exposure Limit (PEL)** - An OSHA occupational exposure limit (without regard to the use of respirators) for airborne contaminants. For lead it is 50 micrograms per cubic meter of air ( $50 \mu g/m^3$ ) for an 8-hour Time-Weighted Average (TWA). Exposure to airborne lead above the PEL triggers requirements such as housekeeping, engineering controls, showers, change and lunch rooms, area posting, personal protective equipment, and respiratory protection.

If an employee is exposed to lead for more than 8 hours in any work day the employees' allowable exposure, as a time weighted average (TWA) for that day, shall be reduced according to the following formula:

Allowable employee exposure (in  $ug/m^3$ ) = 400 divided by hours worked in the day

**PPE-** Personal Protective Equipment. Safety equipment worn by employees; may include safety glasses, respirators, coveralls etc.

# 3. Hazards of Lead

#### 3.1 Ways in Which Lead Enters the Body

Lead can be absorbed into the body by inhalation (breathing) and ingestion (eating). Lead (except for some organic compounds not covered by this program) is not absorbed through the skin. Inhalation of lead is considered the most important source of occupational exposure. When lead is scattered in the air as a dust or fume particle, it can be inhaled and absorbed into the blood stream through the lungs and upper respiratory tract. Lead can also enter via the digestive system if it enters the mouth and is swallowed. As an example, lead can be ingested by handling cigarettes, food, etc., with lead contaminated hands.

#### 3.2 Lead Health Effects

1. Short term (acute) overexposure. Large doses of lead may cause seizures, coma, and death from cardio-respiratory arrest. Short term occupational exposures leading to these effects are unusual but possible.

2. Long-term (chronic) overexposure may result in damage to the blood-forming, nervous, urinary, and reproductive systems. Some common symptoms of overexposure include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, insomnia, headache, nervous irritability, muscle and joint pain, and tremors.

When lead gets into the body it is only partly eliminated. The majority of the lead is stored in the bones and other tissues. As exposure to lead continues, the amount stored in the body increases if more lead is absorbed than is excreted. Consequently, continuous exposure to low levels of lead can, over time, cause lead to accumulate in the body and lead poisoning may result.

# 4. Organization / Responsibilities

#### 4.1 Certified Industrial Hygienist (CIH)

The CIH shall be responsible for the development and implementation of the Lead Exposure Control Plan. The CIH is experienced in developing and implementing health & safety programs, developing employee exposure assessment and air monitoring programs, developing and implementing of personal protective equipment and respiratory protection programs.

The CIH for this project is Mr. Timothy M. O'Rourke, CIH.

Specific responsibilities of the CIH include:

- Development and implementation of the Lead Exposure Control Plan.
- Coordinating the initial lead assessment.
- Being available for consultation with the Competent Person.

#### 4.2 Competent Person

The Competent Person is responsible for the implementation and enforcement of the Lead Exposure Control. The Competent Person has the authority to stop work any time unsafe work conditions are determined. No work impacting lead will be performed without the presence of the lead competent person

The Competent Person for this project is Mr. Bruce Cooley.

#### 4.3 Job Site Inspections

All lead related work activities will be conducted under the direction of a Competent Person. The Competent Person will perform daily job site inspections to ensure compliance with this Lean Exposure Control Plan.

#### 4.4 Subcontractor Compliance

It is not anticipated any subcontractors will be performing lead related work.

# 5. Sources of Potential Lead Exposure

This project involves the interior hand demolition of non-load bearing walls and other items (soft demolition). Paint coatings on items to be demolished contain lead. Exposure to lead is possible during manual demolition of these walls.

No torch cutting of structural steel is anticipated. If torch cutting steel is necessary, this lead compliance plan must be revised to include appropriate controls for this operation.

# 6. Initial Exposure Assessment

An initial lead assessment will be performed during manual demolition operations. The assessment will be conducted in accordance with 29 CFR 1926.62. A minimum of two full shift samples will be collected during demolition operations. Due to the variability of lead based coatings, it is anticipated multiple samples will be collected over a few days. Full shift samples will representative of the monitored employee's regular daily exposure to lead.

Samples will be collected and analyzed using NIOSH Method 7300 and reported within 48 hours. Samples will be collected on the manual demolition operations are started.

#### 6.1 Protection of Employees during Initial Assessment

29 CFR 1926.62 requires employees to be adequately protected during the initial exposure assessment. In accordance the 20 CFR 1926.62, it is assumed hand demolition operations will result in air concentrations above the PEL of 50 ug/m<sup>3</sup>, but less than 10 times the OSHA PEL. Therefore the controls required in this plan are required while conducting the initial assessment and must be followed until results of the initial assessment are received and reviewed.

The controls required may change based on the results of the initial assessment. All controls detailed in Sections 6 - 13 of this plan are required during the Initial Exposure Assessment. If changes are appropriate based on the results of the Initial Lead Assessment, they will be made in writing by revising this Lead Compliance Plan.

#### 6.1.1 Respiratory Protection

A half face air purifying respirator equipped with P100 filters will be used. A fit test will be performed on-site before demolition operations begin. Respirators will be used in accordance with OSHA's Respiratory Protection Standard.

#### 6.1.2 Protective Clothing

Disposable protective work clothing will be supplied and worn by laborers performing lead activities in the lead work area.

Required protective work clothing includes:

- Coveralls
- Disposable full body coveralls (tyvek)
- Gloves
- Hard hat and eye protection
- Foot coverings:
  - Booties (tyveks)

Protective work clothing will be removed and left in a container labeled as follows:

#### "Clothing contaminated with Lead. Do not remove by dust by blowing or shaking. Dispose of lead contaminated wash water in accordance with applicable local, state or federal regulations."

The employer shall provide the protective clothing required in this section in a clean and dry condition daily to employees. Employees will wear full body coveralls and disposable coveralls when performing lead activities. Disposable coveralls will be disposed of each shift. Coveralls worn under disposable coveralls will be removed in the change room.

#### 6.2 Employee Notification

Within five (5) working days after air monitoring is conducted, each employee will be notified in writing of the results. The CIH will prepare result summary sheets and provide to the Competent Person for distribution to employees.

# 7. Engineering Controls & Work Practice Controls

Engineering controls will be used to reduce employee exposure. Water will be applied during demolition to reduce dust. Portable fans are available onsite and will be used where feasible to exhaust dust from the building.

Lead work areas will be cordoned off and posted with appropriate lead signs to keep unauthorized people out of the work area.

Administrative controls may also be used to control exposure. Administrative controls involve implementing a job rotation schedule to limit each individual's exposure. If administrative controls are used, a schedule identifying each employee and exposure time will be kept.

# 8. Hygiene Practices

This section is very critical in dealing with lead work. Improper hygiene practice can result in lead contamination leaving the work site. An existing bathroom will be used for a wash and change area. The change area will be used for donning clean disposable protective work clothing. A separate area will be provided for removing dirty disposable protective work clothing. Wash water and towels will be provided in the hygiene facility.

Additionally, the following rules apply:

- 1. All drinking water and eating areas will be away from the lead work zone.
- 2. No consumption of food or beverages; no smoking; and no cosmetic application are allowed in areas where employees may be exposed to lead.
- 3. Employees are not allowed to leave the work area wearing any protective work clothing or equipment that is required to be worn during the work shift.
- 4. A lunch area will be provided. The lunch area will be kept as free as practical from lead contamination. All employees performing hand demolition operations are required to use the change out and wash their hands and face before entry to the lunch area is allowed.
- 5. All employees performing hand demolition operations must wash their hands and face before eating, drinking, smoking, applying cosmetics.

# 9. Medical Surveillance & Removal Procedures

Initial medical surveillance for lead will be performed for all laborers performing hand demolition operations. Initial medical surveillance will consists of blood sampling and analysis for lead and Zinc Protoporphyrin (ZPP) levels.

More detailed medical exams will be provided in accordance with 29 CFR 1926.62(j)(3), if an employee's blood level increases above 40 ug/dl or as soon as possible, upon notification by an employee either that the employee has developed signs or symptoms commonly associated with lead intoxication, or that the employee desires medical advice concerning the effects of current or past exposure to lead.

Initial medical surveillance will be done before demolition operations begin.

Based on the results of the initial lead assessment, additional biological monitoring may be necessary.

#### 9.1 Employee Notification

Within five (5) working days after receipt of biological monitoring, each employee will be notified in writing of the results. The competent person will notify each employee.

#### 9.2 Medical Removal

Results of biological monitoring or the recommendations of an examining physician may necessitate removal of an employee from further lead exposure pursuant to the standard's medical removal protection (MRP) program. The object of the MRP program is to provide temporary medical removal to workers either with substantially elevated blood lead levels or otherwise at risk of sustaining material health impairment from continued substantial exposure to lead.

Per OSHA's standard, a worker will be removed from any work having an eight hour TWA exposure to lead of 30 ug/m(3) when his or her blood lead level reaches 50 ug/dl. In addition to the above blood lead level criterion, temporary worker removal may also take place as a result of medical determinations and recommendations. If the examining physician includes a medical finding, determination or opinion that the employee has a medical condition which places the employee at increased risk of material health impairment from exposure to lead, then the employee will be removed from exposure to lead. Return of the employee to his or her job status depends on a worker's blood lead level declining to 40 ug/dl.

## 9.3 Removal Protection Benefits

Any employee removed from lead exposure will be provided medical removal protection benefits in accordance with 29 CFR 1926.62(k)(2). During the period of special protection or removal, Bianchi Industrial Services will maintain the worker's earnings, seniority, and other employment rights and benefits (as though the worker had not been removed) for a period of up to 18 months, or for as long as the job the employee was removed from lasts, if less than 18 months. The provisions of MRP benefits during the employee's removal period are, however, conditioned upon employee participation in medical surveillance.

# 10. Training

The hazards of lead will be communicated to employees and subcontractors in accordance with Bianchi Industrial Service's Hazard Communication Program.

In addition, all employees performing hand demolition operations will be provided with the following training:

- The contents of the lead standard and appendices;
- The specific nature of the operations which could result in exposure to lead above the action level;
- The purpose, proper selection, fitting, use, and limitations of respirators.
- The purpose and description of the medical surveillance program and medical protection program.
- Adverse health effects of lead, with special attention to reproductive health.
- The engineering controls and work practices associated with the job assignment, including good work practices.
- The contents of this lead compliance plan.
- Instructions that chelating agents should not be routinely used to remove lead from their body and should be used only under the direction of a physician.
- Employee's right of access to records under 20 CFR 190.20

# 11. Warning Signs

The following warning sign will be placed and will be placed around the lead work area.

#### WARNING LEAD WORK AREA POISON NO SMOKING OR EATING.

#### **12. Exposure Monitoring**

Based on the results of the initial lead assessment, additional air monitoring may be necessary. If results are above the action level, but below the PEL, monitoring must be performed every 6 months. If results are above the PEL, monitoring must be performed every 3 months.

Additional personal air monitoring will be conducted any time a change in operations may increase employee exposure.

Within five (5) working days after air monitoring is conducted, each employee will be notified in writing of the results. The CIH will prepare result summary sheets and provide to the Competent Person for distribution to employees.

# 13. Record keeping

In accordance with OSHA 29 CFR 1910.20 and 1926.62, the following records will be kept for at least 30 years:

- Exposure assessments and monitoring;
- A description of the sampling and analytical methods used;
- The type of respiratory protective devices worn; and,
- Name, social security number, and job classification of the employee monitored.

In addition, the following medical records will be kept for employees subject to medical surveillance for at least 30 years:

- Name, social security number, and description of the duties of the employee;
- A copy of the physician's written opinions;
- Results of any airborne exposure monitoring done on or for that employee and provided to the physician; and,
- Any employee medical complaints related to exposure to lead.
- A copy of the medical examination results including medical and work history required under OSHA 1926.62 (j);
- A description of the laboratory procedures and a copy of any standards or guidelines used to interpret the test results or references to that information;
- A copy of the results of biological monitoring.

If the employee was removed from lead work under the medical removal provisions, the following records must be maintained for at least the duration of the employee's employment:

- The name and social security number of the employee;
- The date of each occasion that the employee was removed from current exposure to lead as well as the corresponding date on which the employee was returned to his or her former job status;
- A brief explanation of how each removal was or is being accomplished;
- A statement with respect to each removal indicating whether or not the reason for the removal was an elevated lead level.