John Strang - FW: BASF

From:

Mark Hodgkins <mhodgkins@jacksondemolition.com>

To:

John Strang < jrstrang@gw.dec.state.ny.us>

Date:

3/19/2010 10:17 AM

Subject:

FW: BASF

CC:

"jkarabinchak1@vzw.blackberry.net" < jkarabinchak1@vzw.blackberry.net>

Attachments: 405 BASF - HASP - 03.19.10.pdf; 405 BASF - Appendix B - 03.19.10.pdf; 405 BASF -

CAMP Appendix A - 03.19.10.pdf

Hopefully this is what you need to finalize the plan.

Our work hours will generally be 7am to 5:30 Pm Monday thru Friday and 8hours on Saturday

Mark N Hodgkins Vice President

Jackson Demolition Service Inc.

Phone 518-374-3366 518-372-1116 Fax

BASF BUILDING DEMOLITION F MATERIALS MANAGEMENT PLAN

SITE NO. 442027, OUI RENSSELAER, NY

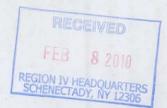
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Information from ESET NOD32 Antivirus, version of virus signature database 4919
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SERVICE, INC.

2754 Aqueduct Road Schenectady, NY 12309

Phone: (518) 374-3366 Fax: (518) 372-1116



letter c	of transmittal			
	Marine Remediation Inc	Date: Re:	2/8/2010 JDS Job #J-405 BASF	
We are sending you:	Attached	U U	nder separate cover via	
☐ Copy of Letter	□ Submittals		☐ Samples	
☐ Change Order	□ Plans/Specs		☐ Other: Contract	
Qty. Ite	em No. Description	n		
1	Hazardous Mai	erial Surve	y (C.D.)	
1	Building Demo	lition & Mat	rerials Management Plan (C.D.)	

These are transmitted as followed	lows:	*
☐ For Approval	☐ Approved as submitted	☐ Resubmit copies
☐ For your use	☐ Approved as noted	☐ For review & comment
☐ As requested	☐ Returned for corrections	☐ For Amendment/Return
□ For Bids Due		☐ Prints returned after loan to us

REMARKS: Please let me know if you have any questions.

cc: John Strang NYSDEC

Mark Hodgkins, Vice President mhodgkins @jacksondemolition.com

www.jacksondemolition.com



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www.jacksondemolition.com

SERVICE, INC.

February 5, 2010

Mr. Jamie Karabinchak
Land & Marine Remediation Inc.
10 Liberty Street
Edison, NJ 08837

Re: BASF Manufacturing Plant - Site No. 44207 - Rensselaer, NY

Mr. Karabinchak:

In response to the NYDEC letter addressed to your firm dated January 29, 2010 we offer the following clarifications.

General Comments:

- Plan Reorganization: Per the request our submittal will follow the Building Demolition and Materials Management Plan provided at the end of the Jackson Demolition Services, Inc (JDS) Health and Safety Plan (HASP).
- 2. Community Air Monitoring Plan (CAMP): The CAMP has been added as Appendix "A", see attached.
- 3. Air monitoring will be provided by others
- 4. All demolition operations will comply with all local, state and federal requirements.

Building Sampling Comments:

- 1. Hazardous Materials Survey: A C.D. formatted copy is attached as Appendix "B", see attached.
- 2. Sampling Protocols: Sampling protocols are detailed in Appendix "B".
- Jackson Demolition Services has and will continue to stay in communication with NYSDOL related to the asbestos part of this project.

Section 2: Health and Safety Plan (HASP)

1. Attached is our amended HASP as commented on in the NYSDEC letter.



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Section 3: Off-Site Disposal

- 1. A hazardous waste determination will be completed prior to off-site shipping.
- 2. BASF is handling the hazardous waste disposal.

Section 4: Onsite reuse of demolished material

1. This contractor understands the need to request reuse of demolished material for NYSDEC

If you have any questions regarding the contents of this letter please give me a call.

Sincerely,

Mark Hodgkins

Vice President



2754 Aqueduct Road Schenectady, NY 12309

Phone: (518) 374-3366 Fax: (518) 372-1116

BASF

Rennselaer, NY Building Demolition and Materials Management Plan

1.a.i. – Building Sampling – LMR- Following the hazardous materials survey provided in the contract documents demolition debris will be sampled and tested prier to load out in order to determine where final disposition of the different waste streams will go.

1.a.ii. - Health and Safety Plan - See attached plan

1.a.iii. – Off-site Disposal – Jackson will provide clean C&D disposal off site to a Certified landfill. Any hazardous waste disposal is by others.

1.a.iv. - On-site re-use - LMR will be reusing crushed hard fill for fill on site.

Concrete Recycling of hardfill generated by demolition operations. All clean hardfill i.e. brick, block and concrete will be stock piled at various locations around the site prior to crushing.

Crushing of material — Utilizing a portable crusher such as an Eagles 1000 impactor crusher the material will be crushed to a size of 6" or less. This operation will generate a usable product for backfilling the low areas in and around the site such as basements, trenches and low lying areas. During this process water will be used to control dust generated by the crusher.

Health and Safety Plan (HASP) 1.a.ii.

BASF Plant

Rennsselaer, NY

Prepared By:

Jackson Demolition Service, Inc. 2754 Aqueduct Road Schenectady, NY 12309

February 8, 2010

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1.0 INTRODUCTION

The following Work and Safety Plan (HASP) has been developed for the protection of Jackson Demolition Services, Inc. (JDS) employees for demolition of the BASF located in Rennselaer, New York. This project's work elements require JDS employees to perform tasks where physical and/or chemical hazards may impact personal safety. The HASP is also intended to protect the employees and assets belonging to BASF and Land and Marine Remediation (LMR) located outside of the defined demolition area.

Chemical residuals, asbestos, lead paint and other hazardous materials may be encountered at the BASF site. The HASP addresses these and other hazards typically associated with manual and mechanical demolition work. Should any hazard or exposure be identified or encountered other than asbestos, lead paint and PCB containing components, JDS will stop work in the area where the discovery was made and notify the LMR representative.

While conducting this work, JDS employees may be exposed to the following types of demolition related hazards:

- Heavy/Mechanical Equipment;
- Unstable Structures, Buildings and Foundations;
- Lead-Based/BASF Products/ Asbestos/ Mercury/ PCB's

The intention of this site-specific Health and Safety Plan (HASP) is to provide a Health and Safety Manual that has been designed to correspond with the potential hazards and exposures of this project. In addition, all work will be conducted in accordance with all applicable LMR Policies and Contractual Conditions, federal, state and local regulations.

The requirements and guidelines in this HASP are based on a review of available information and an evaluation of potential on-site hazards. This HASP will be discussed and reviewed with site personnel and will be available on-site for review by the appropriate personnel while work is underway. JDS personnel will report to the JDS Site Superintendent for matters related to environmental, health and safety. The Superintendent and Site Safety tech are responsible for ensuring compliance with this HASP, implementing this HASP into daily site activities, and stopping work if necessary. In addition, if any JDS employee encounters an unsafe condition, unknown hazard, or other exposure they are to stop work and notify the Site Superintendent, SST, or LMR Owner Representative in the field.

2.0 SUMMARY OF THE WORK

2.1 Objectives

The work generally consists of the demolition of the BASF Chemical plant Buildings 40, 41, 42, 45, 46, 60, 61, 62, 65A, 67, 71, 72, 74, 75, 81, 82, 83, 84, 87, 88, 88A, 91 and 93, and associated equipment, tanks and stack. This work includes:

- Confirmation utility systems have been disconnected and that remaining live systems are properly identified
- Mechanical Demolition of buildings, structures, equipment, tanks and stack.
- Stock piling of hard fill
- Management of debris and scrap
- Jackson Demolition Service Inc. (JDS) will perform the work in accordance with, all applicable federal, state, and local regulations, the specifications issued by LMR and the means and methods described in this HASP.

2.2 Site Description

The BASF plant is located in Rennselaer, NY along Riverside Ave. The site is composed of the North 40 area. The North 40 includes the main plant and buildings 45, 46, 60, 61, 62, 65A, 67, 71, 72, 74, 75, 81, 82, 83, 84, 87, 88, 88A, 91 and 93.

2.3 Prerequisite Requirements

2.3.1 Work by Others

Before JDS begins work, LMR and/or its subcontractors will perform the disconnection and air gaps of all associated utilities, pipe, electrical and controls systems in order to turn the facility over for demolition.

Decontamination of the project area and all associated structures, equipment, tanks, piping, etc. has been performed by LMR and/or their Contractors prior to the work performed by JDS. This HASP assumes all hazardous materials have been assessed and removed in accordance with applicable regulations and that remaining structures, equipment, tanks, piping, etc. has been properly decontaminated.

2.3.2 Work by JDS

JDS will complete the following prerequisites prior to starting the physical work associated with this project:

- Notifications to regulatory agencies;
- Work plan submittal approval;
- Project-specific Health and Safety Plan approval;
- Health and safety training as required by LMR and regulatory agencies
- Engineering Survey in accordance with OSHA requirements.

2.4 Areas to Be Protected

- JDS understands that the following areas are to be protected during the course
 of the work. JDS will work with LMR to ensure that all such areas are clearly
 marked and delineated either in the field and on drawings, as appropriate:
- Monitoring wells and fire supply lines
- Slab on grade concrete

2.5 Engineering Survey

Prior to the start of work, JDS will perform an Engineering Survey specific for demolition activities in accordance with OSHA Regulations 29CFR Part 1926 Subpart T. The purpose of the survey is to evaluate the project and the demolition methodology to assess the potential for the unplanned or sudden collapse of structural components during the demolition operations.

A copy of the final Engineering Survey for this project will be forwarded to the LMR Contract Administrator prior to beginning demolition work. This HASP is an integral part of the Engineering Survey and as such will be an attachment to this document.

2.6 Demolition

The work generally involves the mechanical demolition of the entire chemical plant and the adjoining WWTP. Buildings, platforms, pipe racks, towers, equipment, tanks, and other items will be demolished using 35 - 50 ton series excavators equipped with shears, grapples, buckets and/or hydraulic hammers.

The following detailed description of the methods that JDS will employ to safely and successfully complete this project are listed for each area of the plant below. The methods described below are intended to convey the means and methods JDS will utilize to perform the work. The methods may appear to be repetitive in nature for each area due to the similar construction that exists throughout the plant.

Each area will be evaluated individually and any specific issue or different types of construction that may exist will be addressed with revisions to this plan prior to work commencing in each area.

2.6.1 Chemical Plant and WWTP Buildings

The facility is comprised of multiple buildings consisting of warehouses, manufacturing, tanks, boiler building and related work areas. These buildings are in various states of disrepair and for that reason a condemnation letter will be acquired for each building allowing an asbestos variance to be acquired, which will allow the buildings to be demolished with asbestos in place. Demolition of these buildings will be started by removing and separating the exterior block and brick walls thereby limiting the asbestos contamination of hard fill which will be reused as fill onsite. Next using a combination of excavators fitted with a grapple or shear, the building will be raised in a control manner from top to bottom. Some torch precutting of the longer structural members will be required in order to safely demolish the buildings. After the building has been collapsed

the steel and recyclable clean fill will be extracted, sorted and prepared for transport off site. The asbestos containing C&D will be separated from the demolition debris and be transported off site by KBI/BASF. The contractor will contact the NYSDOL, as needed, based on the findings of each building's inventory for asbestos.

2.6.2 Pipe Racks – Abatement Method Description for exterior pipe trestle

- 1. Because the piping is all exterior and containments will not be utilized, remote personal and waste decontamination systems will be constructed. Decontamination systems will be cordoned off 25 feet or to the furthest extent possible.
- 2. Where feasible, NYS Code Rule 56-11.8, Abandoned Pipe/Duct/Conduit Wrap and Cut Removal Procedures will be utilized.
- Prior to any abatement activity in each work area, all accessible ground debris will be adequately wet, removed, double-bagged and disposed of in accordance with applicable regulations.
- 4. After completion of ground debris clean-up, the work area will be visually inspected by the abatement supervisor and the project monitor to confirm the work area is clean of visible, accessible debris. At this time, the asbestos abatement of piping insulation shall commence.
- 5. For elevated piping, the work will be done from a lift or the like. The bucket of the lift will be lined with two layers of poly and glovebags will be utilized without the construction of containments.
- 6. The glovebags will be equipped with two heap vacuums to create negative pressure inside the glovebag. One clean hepa bag, which will remain off, will provide make-up air into the glovebag and the other will draw air out. Due to the limited space in a man lift bucket one of the heap vacuums may be a backpack.
- 7. Environmental air samples (to represent daily air sampling) will be conducted as follows:
 - a. Environmental air samples will be conducted on the days the contractor is working. However, placement and amount of samples may vary. Since the work is all exterior, surrounded by dirty, abandoned buildings, and there will be no containments, we are expecting results greater than 0.01 f/cc. We are requesting to run a minimum of three environmental air samples per area, and place them outside the restricted area.
- 8. At the completion of the removals, the work area will be visually inspected by the abatement supervisor

and the project monitor to confirm the work area is clean, dry and free of visible debris.

9. If the last set of environmental samples are below 0.01 f/cc or the background level these shall serve as

the final clearance samples.

2.6.3 Stack Demolition

As one of the final tasks and after the majority of the demolition has been completed, the stack will be demolished using the following process:

- First, a fall zone will be established where the stack will be felled.
- Then, using small demolition tools, i.e. Jackhammers, the base will be chipped away on the side of the stack in the direction of the fall. Using the clock to better describe this process, the area between 3 and 5, in addition to 7 and 9, will be chipped away leaving the stack intact in the areas of 9 to 3 and 5 to 7.
- Lastly, a cable will be wrapped around the 5 to 7 area. This cable will be at least 1.5 times the stack height. The cable will then be attached to an excavator located 90 degrees to the fall direction. The fall zone will be cleared of personnel and equipment. The remaining stack from 5 to 7 will be pulled out allowing the stack to tip over.

2.6.4 Concrete Demolition

Concrete walls, tanks, elevated floors etc. will be demolished, as described below. JDS will employ mechanized excavation, breaking, and removal methods to perform this task. To accomplish the task, excavators may be fitted with Universal Processor crusher jaws, grapples, and/or hammer attachments to break concrete into manageable pieces. Excavators with hammer attachments will be used whenever possible due to their size and ability to perform the work in the safest manner possible. If decibel levels exceed OSHA threshold for any activity or task, JDS employees exposed will wear proper hearing protection.

Once all concrete removal has been completed, LMR will employ a portable concrete crusher to size the concrete materials into the specified sizes for use as fill on site.

2.7 Work Permits

JDS Site Safety Technician working with LMR will issue work permits on a daily basis. The following areas will be addressed as required at a minimum:

- Fire and Spark Producing Operations
- Safety and Environmental Reporting
- Permits required by LMR

3.0 KEY PERSONNEL

3.1 Off-Site Personnel

Senior Level Management/Project Manager

<u>Description:</u> Responsible for defining project objectives, allocating resources, determining the chain of command, and evaluating program outcome.

Contact: Mark Hodgkins, (518) 374-3366

Corporate EHS Consultant

<u>Description:</u> Provides Environmental, Health and Safety (EHS) expertise to upper level management, Project Manager and Field Superintendent. Develops project HASP and assists the Field Superintendent with HASP implementation, compliance and corrective action. Reports to upper level management, provides sufficient authority and resources to satisfy health and safety requirements. Mr. Johnston is also capable and competent to serve as SST.

Contact: A. Jim Johnston, (518) 374-3366

3.2 On-site Personnel

Field Superintendent

<u>Description:</u> Responsible for coordinating project requirements in the field. The Field Superintendent is the Competent Person on site and oversees daily activities of the project and is responsible for implementing EHS requirements and all safety procedures in the field. The Field Superintendent will coordinate all site activities with the LMR Contract Administrator and employees.

Contact: Mike Leandro (518) 857-1807.

Site Safety Officer (SSO)

<u>Description:</u> Provides Environmental, Health and Safety (EHS) expertise to Site Superintendent and field crew. The SSO serves as the administrative and technical support to Superintendent and LMR Safety rep on all field EHS issues. The SSO is responsible for identifying EHS deficiencies to the Site Superintendent for correction. , has the authority to stop work related to EHS concerns. The SSO will conduct routine EHS audits with the Site Superintendent and will institute/track required corrective actions.

Contact: Tim Van Den Bosch (518) 857-1807

4.0 SAFETY TRAINING AND MEETINGS

The Site Superintendent will confirm that every person (JDS employee, local union laborers/operators, and subcontractor employee) assigned to a task has adequate training for that task and that the training is up-to-date for the following:

- Asbestos worker handler certification
- Minimum training shall consist of the following for all employees performing onsite work:
- OSHA 10 hour training for supervisors, lead operators and foreman

- Initial Project Safety Training reviewing HASP and project specific requirements.
- 40 hr. HazWoper training for supervisors, lead operators and foreman

Additional specialized training may be required for employees performing certain tasks to include:

- Lead awareness
- Confined Space Entry; and,
- Man lift training

To ensure that the Health and Safety Plan is being followed, the Field Superintendent/SSO shall conduct and document a safety meeting prior to entry to the site, the initiation of any site new site activity, if any conditions change, and once per week.

In addition, the Filed Superintendent/SSO will hold daily Toolbox Safety Meetings before the start of each work shift. The Toolbox Safety Meetings will review the upcoming work activities, identify potential hazards, discuss any noted EHS deficiencies, and reinforce the culture of a safe work force. JDS will also utilize a Pre-task Safety card on a daily basis at the beginning of each shift, after lunch, or whenever conditions change in the task being performed. Once the demolition process commences, adjustments to the safety card use will be agreed upon by JDS and the LMR representative

The LMR Representative will be provided copies of the minutes and sign-in sheets for all safety meetings and toolbox meetings.

5.0 MEDICAL SURVEILLANCE

All JDS personnel will have had a medical surveillance physical consistent with OSHA regulations in 29 CFR 1910.120 if required. The physical will be performed by a qualified occupational health physician.

6.0 ACCIDENT INVESTIGATION

The proper reporting and investigating of accidents is a necessary part of any accident control program. Determining causes of accidents contributes to the prevention of future recurrences of the same or similar types of accidents.

- All employees are instructed to report to the Site Superintendent or SST for treatment of all injuries, no matter how trivial they may appear;
- All accidents (first aid, near-hit, safety incidents) are to be investigated immediately by the Site Superintendent, SST, and the LMR EHS Representative. The accident report investigation form is to be completed entirely by Superintendent/SSO and LMR EHS representative and sent to the main office for recording and processing. LMR will receive a copy of all reports.
- Properly completed accident report forms are to be forwarded to the insurance carrier's designated office within 24 hours of the accident occurrence.

7.0 DISCIPLINARY POLICY

All employees are expected to comply with job site rules and regulations, and to follow established operating procedures set forth by JDS and LMR. Violations will not be tolerated and the Site Superintendent will be held accountable for the conduct of his/her employees.

The Site Superintendent is required to take action when a violation is observed. Immediate action to control or eliminate a hazard is required. In the event a violation is observed, the following procedures have been established to place an employee on notice.

First Offense: Verbal and/or written warning to the employee and a memorandum placed in the employee's file, referencing the violation and warning, including date and time of occurrence. The employee may be terminated depending upon the severity of the violation.

Second Offense: A written warning addressed to the employee with reference to the date and time of the occurrence; a copy of this warning will be given to the employee, the union if applicable, and another copy will be placed in the employee's file. The employee may be terminated depending upon the severity of the violation.

Third Offense: If the employee is not terminated after the second notice, a third notice will be prepared and distributed in the same manner as above; a meeting will then be held to determine appropriate managerial action. The employee may be terminated depending upon the severity of the violation.

The above procedure has been prepared so that there is no question as to how violations or rules, regulations and procedures will be handled by management, and to ensure employees will be aware of what to expect if they do not comply with the established rules, regulations and procedures. Management knowledge of unsafe behavior and lock of appropriate documentation may be a violation of Federal and/or State laws and regulations.

8.0 HAZARD EVALUATION

8.1 Hazard Identification

Hazards are generally divided into three categories, exposure to chemicals and hazardous materials, safety/physical hazards and biological hazards. Considering the nature of the work, chemical hazards and safety/physical hazards to demolition operations are addressed in this HASP.

8.1.1 Physical Hazards

Physical hazards such as the following may be encountered during the project:

- Heavy/Mechanical equipment;
- Slip/trip/falls;
- Unstable Equipment, Structures, Buildings/Foundations;
- Site Traffic; and,
- Electrical equipment.
- Elevated noise levels.

8.1.2 Chemical Hazards

Chemical hazards such as the following may be encountered on site:

- Lead-containing, lead-based paints;
- Asbestos Containing Materials (ACM's);
- Other hazardous and Non-hazardous regulated wastes
- Residual process chemicals; and

No manual disturbance of lead is anticipated in the scope of work. In isolated instances, painted metal components may be torch cut. Torch cutting of painted materials will be performed in accordance with the OSHA Lead Standard, 1926.62 and an initial exposure assessment will be conducted by JDS in compliance with OSHA requirements.

Work involving ACM's, residual process chemicals, lead paint and PCB's may be encountered.

Chemical	Location	PEL	IDLH	Characteristics	Routes of Exposure	Symptoms of Exposure/ Health Effects
Lead Paint	Any painted surface	0.05 mg/m ³	100 mg/m ³	Heavy, ductile, soft, gray solid. Found in paint applied before 1970's. If there are no sampling results, all painted surfaces should be assumed to contain lead.	Inhalation, ingestion, contact with skin	Weakness, insomnia, facial pallor, weight loss, constipation, abdominal pain, colic, anemia, hypo tension
ACM's	Will be Encountered	0.1 f/cc	NA	Commonly white fibrous insulation material. Other forms are very common.	Inhalation, absorption, ingestion, contact with skin	Respiratory diseases. Lung cancer.
Residual Chemicals	Previously cleaned by BASF personnel	Varies See MSDS	Varies See MSDS	Varies See MSDS	Varies See MSDS	Varies See MSDS
Contaminated Soil	Below elevation at which demolition occurs	Varies See MSDS	Varies See MSDS	Varies See MSDS	Varies See MSDS	Varies See MSDS
PCB's	Not present	ILV-05 mg/m3 Skin irritatio n	N/A	Light yellow viscous liquid. Irritating to skin and eyes. Low volatility.	Inhalation, absorption, contact with skin and eyes.	Irritation to eyes, can cause chloracne, suspected carcinogen

8.2 Hazard Control

Hazard controls consist of following specific safety procedures:

- Training;
- Engineering Controls;
 Air Monitoring;
- Personal Protective Equipment (PPE)
- Hygiene Practices.

8.2.1 Physical Hazards

Heavy Equipment and	Unstable Equipment Building and Foundations
Training	All equipment operators will be trained through classroom training and/or on-the-job experience to operate the type of equipment assigned. Repair and maintenance of equipment will only be performed by trained mechanics.
Engineering Controls	Heavy equipment will be operated in delineated demolition zones. Only trained operators or supervisory personnel will be allowed within the demolition zone.
Air Monitoring	Refer to the CAMP (Appendix A)
Personal Protective Equipment	PPE will be selected and used in accordance with applicable regulations and LMR Policies. PPE will consist of Level D protection: hardhats, ANSI safety glasses, goggles, safety shoes, and Hi-Visibility Safety Vests and hearing protection if required.

Slips/Trips/Falls	
Training	Personnel will be trained to recognize and correct slip/trip/fall hazards through on-site safety meetings.
Engineering Controls	Slip/Trip/Fall hazards will be eliminated where possible. Otherwise, OSHA compliant protective measures (guardrails, fall-protection, and opening protection) will be installed and maintained.
Air Monitoring	Refer to the CAMP (Appendix A)
Personal Protective Equipment	PPE will be selected and used in accordance with applicable regulations and will consist of Level D protection: hardhats, ANSI safety glasses, and safety shoes.

Site Traffic	
Training	Personnel will be trained to recognize and eliminate traffic hazards through on-site safety meetings.
Engineering Controls	The site superintendent will establish and

	maintain access roads within the project site for the safe movement of equipment and vehicles, and containment and collection of regulated waste materials
Air Monitoring	Refer to the CAMP (Appendix A)
Personal Protective Equipment	PPE will be selected and used in accordance with applicable regulations and will consist of Level D protection: hardhats, ANSI safety glasses, Hi-Visibility Safety Vests, and safety shoes and hearing protection if necessary.

Electrical	
Training	Personnel will be trained to recognize and eliminate electrical hazards through on-site safety meetings. The site superintendent will ensure all live power within the work areas has been identified and communicated to personnel.
Engineering Controls	The site superintendent will ensure that only properly grounded electric tools and equipment in good condition will be used. GFCI protected circuits will be used.
Air Monitoring	Refer to the CAMP (Appendix A)
Personal Protective Equipment	PPE will be selected and used in accordance with applicable regulations and will consist of Level D protection: hardhats, ANSI safety glasses, Hi-Visibility Safety Vests, and safety shoes.

8.2.2 Chemical Hazards

Lead Based Paint	
Training	All laborers performing manual disturbance, or torch cutting of lead containing paints shall receive lead awareness training and respiratory protection training.
Engineering Controls	Torch cutting will only be performed in well-ventilated areas. Ventilation equipment will be supplied in confined area.
Air Monitoring	Refer to the CAMP (Appendix A)
Personal Protective Equipment	PPE will be selected and used in accordance with applicable regulations and LMR Policies. PPE will consist of a minimum of Level C protection: half-face negative pressure respirator, ANSI eye protection, hardhats, safety shoes, and fire resistant gloves and clothing. JDS maintains negative exposure assessments for previous lead operations.

Asbestos Materials		
Training	Personnel will be trained to recognize and report the presence of suspect ACM's	
Engineering Controls	As per DOL variance	
Air Monitoring	Refer to the CAMP (Appendix A)	
Personal Protective Equipment	As required by DOL and OSHA regulations	

Residual Chemicals		
Training	Personnel will be trained to recognize and report the presence of residual chemicals.	
Engineering Controls	NA	
Air Monitoring	Refer to the CAMP (Appendix A)	
Personal Protective Equipment	Level D with Hygiene Plan in Section 8.3	

Contaminated Soil				
Training	Personnel will be trained to recognize and report the presence of contaminated soil. If contaminated soil is encountered and included as scope of work for JDS, all JDS employees involved will have minimum 40 hour HAZWOPR training.			
Engineering Controls	NA			
Air Monitoring	Refer to the CAMP (Appendix A)			
Personal Protective Equipment	Level C with Hygiene Plan in Section 8.3. If contamination is encountered, the PPE may change as necessary.			

8.3 Hygiene Plan

JDS will institute a hygiene plan to minimize the potential spread of incidental chemical contamination out of the work zone. Plan will be reviewed with all employees, subcontractors and revised as necessary

9.0 AIR MONITORING AND ACTION LEVELS - See Page 2 of the CAMP included in Appendix A

9.1 Air Monitoring

The following personnel monitoring will be used on site at the specified intervals. Monitoring instruments will be calibrated prior to each full day of equipment use, or more frequently in accordance with manufacturer's recommendations. Calibrations will be recorded in the Field Notes for the day.

Contaminant/Method	Frequency	Action Level	Action
Lead Particulates/ Personal Air Monitor	8-hr TWA will be established at the start of work and monitored throughout any torch cutting of painted materials unless a negative exposure assessment has been performed	30 ug/m ³ 50 ug/m ³	Engineering Controls, Respiratory Protection Medical Monitoring necessary Stop work; use engineering controls, then PPE to reduce exposure

9.2 Action Levels

Should Action Levels be reached, work operations shall cease until further evaluation is performed and safe levels are prevalent. If, through engineering controls and monitoring, safe levels (below Action Levels) cannot be achieved, an upgrade in PPE shall be mandated by the Site Superintendent or operations shall cease in that portion of the site.

10.0 SITE CONTROL MEASURES

The general public including contractors not associated with the Demolition work will not be allowed on site unless escorted by a JDS employee or their designated representative. The site control fence will be posted with signage restricting site access.

10.1 Support Zone

The areas outside the active work zone will be used as the Support Zone (SZ) and will include areas for Site personnel and visitors to conduct activities outside the demolition work areas. The support zone will contain the office trailer, storage trailer and portable sanitary facilities, and will also act as the area for daily planning, Health and Safety meetings and communication and coordination center for emergency situations.

10.2 Demolition Zone

The entire project area will be designated as the Demolition Zone and will be isolated by the existing chain link fence. Access to and from the demolition zone will be limited to designated entrances through fence. Signs will be posted along the outside of the fence warning the general public that this is a demolition site and to stay out.

10.3 Demolition Exclusion Zone

A demolition exclusion zone will be established with a temporary 4' construction fence and signage to ensure the safety of on-site personnel during mechanical demolition activities. The demolition exclusion zone will be established in areas of active mechanical demolition to delineate areas of increased hazards resulting from operating heavy equipment and unstable structural components. Only properly trained equipment operators and related supervisory personnel will be allowed into the demolition zone. Necessary barricades, caution tape and signs warning of demolition activities will be posted around the perimeter of the demolition exclusion zones. A buffer zone will be established adjacent to the demolition exclusion zone as necessary to protect adjacent structures and personnel.

10.4 Contaminant Reduction Zone

A Contaminant Reduction Zone (CRZ) will be established, if contamination is encountered to prevent the potential spread of residual chemical contamination. The CRZ will be established between the demolition zone and the support zone. Prior to entering the demolition employees will upgrade PPE as necessary and may include disposable Tyvek suits. Upon exiting through the CRZ to the SZ, employees will remove disposable protective clothing and place them into a labeled drum for proper disposal as more fully described in Section 8.3 Hygiene Plan.

Upon completion of the project, heavy equipment and/or tools that may have contacted contaminated soils, chemical residue or asbestos will be cleaned as specified in the Request for Proposal (RFP) to prevent the spread of contamination beyond the work area in accordance with applicable federal, state and local regulations.

11.0 HAZARD COMMUNICATION

JDS will follow our Hazard Communication Policy as outlined in our Health and Safety Manual. Project specific hazards will be communicated at the pre-work safety orientation and the weekly safety meetings.

In addition, LMR will provide HAZCOM training materials for potential, unit-specific hazardous materials.

12.0 PERSONAL PROTECTIVE EQUIPMENT

Task/Operation	Level of PPE	Equipment
Standard Demolition Work	Level D	Hardhat, ANSI safety glasses, ANSI safety
	Standard	shoes, safety vest, gloves, safety glasses
Demolition Work including asbestos	Level C	Hardhat, ANSI safety glasses, ANSI safety
work	Upgraded	shoes, long-sleeve shirt, safety vest, gloves,
		goggles, disposable coveralls, and respirator
		per state and federal regulations.
Torch Cutting Painted Materials	Level C	Level D upgraded plus respirator, ANSI eye
		protection, fire resistant gloves and fire
		retardant clothing. Fire retardant clothing
		with potential lead contamination will remain
		at site or be laundered for reuse. JDS will
		establish decontamination area in
		compliance with OSHA 1926 lead standard.

The use of PPE will be supplemented by the Hygiene Plan described in Section 8.3

13.0 EMERGENCY PROCEDURES

The following emergency procedures will be used by on-site personnel. The Field Superintendent will be notified of any on-site emergencies and be responsible for ensuring that the appropriate measures are followed. Non-emergencies will be treated on-site by JDS personnel and documented, then directed to seek further medical attention, if necessary. All occupational injuries and illnesses will be reported, recorded and investigated in full coordination with LMR personnel.

Site will be equipped with an air horn and walkie-talkie for communication purposes. Other emergency equipment, including a fire extinguisher and flashlight will be on-site at all times. In the case of a medical emergency, indicated by one long blast of an air horn, the crews will then communicate by walkie-talkie to determine the nature of the emergency and the location. After the Field Superintendent determines whether there is an actual emergency, he/she will instruct someone to call the Emergency Number 911 and report the location, details, and type of emergency to LMR.

If an emergency evacuation of the project site must take place within the work area, JDS employees will immediately stop work, shut off all equipment and assemble at the predesignated mustering point to be identified with LMR representative. The Field Superintendent will check the sign-in/sign-out logbook to make sure everyone is accounted for. After assembly of personnel JDS employees will follow LMR designated emergency procedures. Head counts will be reported to the designated LMR Construction field rep.

13.1 Personnel Injury

All injuries, no matter how slight, are to be reported immediately to JDS Site Safety Officer. If the injury increases the risk to others, activities on-site will stop until the added risk is removed or minimized. The Field Superintendent shall alert the BASF Representative immediately.

13.2 Fire/Explosion

Upon notification of fire or explosion, the designated emergency signal (2 short blasts) will be sounded and all site personnel will assemble at a safe distance upwind of the involved area. The Field Superintendent shall alert the LMR Representative immediately.

13.3 PPE Failure

If any site worker experiences a failure or alteration of PPE that affects the protection factor that person and his/her buddy will immediately exit the work zone. Re-entry will not be permitted until the equipment has been repaired or replaced.

13.4 Chemical Exposure

Any suspect or confirmed chemical exposure will be reported to LMR medical facility immediately. Any JDS employee exposed to chemical contamination will be decontaminated prior to transport to medical facility, if possible. If any site worker experienced adverse effects due to chemical exposure, the appropriate first aid procedures will be followed according to the Material Safety Data Sheets (MSDS) and BASF protocol for that chemical. The person will at a minimum be moved to fresh air. In the case of accidental skin contact with contaminated materials, the area will be washed thoroughly for at least 5 minutes. If the eye is affected, it will be rinsed for 15 minutes, making sure the chemical does not wash into the other eye. If the victim needs to receive additional medical care, decontamination will be done, if possible.

13.5 Spill Control

LMR personnel shall be notified immediately if JDS encounters any chemical residues or contaminated soils. JDS personnel will evacuate the immediate area and assemble at the designated muster point until further evaluation and assessment is performed in consultation with BASF personnel. Cleanup or other response to chemical spills or contaminated soils is beyond the scope of the JDS contract work. NYSDEC will be notified as well.

14.0 Emergency Contacts

NYSDEC Spills Hotline (800) 457-7362 NYSDEC – Region IV Office, John Strang (518) 357-2045 BASF Site Contact – Wayne ST. Clair (518) 465-6534

Site Superintendent/PM: On-site: Tim Van Den Bosch (518) 857-1807

Site Safety Officer: On-site: Mike Leandro (518) 857-1807

Project Manager/Home Office: Mark Hodgkins (518) 374-3366

EHS Consultant: Jim Johnston (315) 455-6237

14.1 Location of the Nearest Hospital

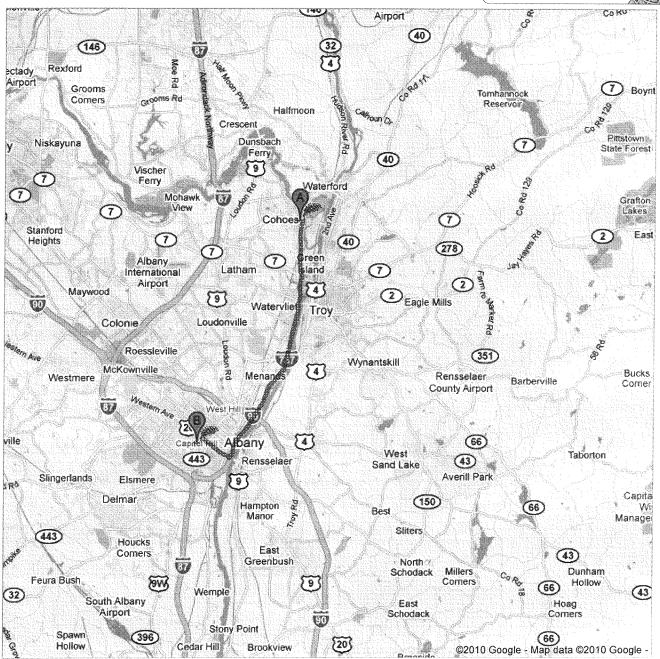
Albany Medical Center located at 43 New Scotland Ave., Albany, NY 12208. Phone number is (518) 262-3125. Map and directions attached.

Google maps

Directions to 43 New Scotland Ave, Albany, NY 12208

11.6 mi - about 17 mins







Cohoes, NY

1.	. Head north on Mohawk St toward Ontario St		go 72 ft total 72 ft	
p 2.	Take the 1st right onto Ontario St About 1 min			go 0.2 mi total 0.2 mi
787 3.	Turn right at NY-787 S About 3 mins			go 2.0 mi total 2.1 mi
787 4.	Continue onto I-787 S About 7 mins			go 7.6 mi total 9.8 mi
5.	Take exit 3B to merge onto Madisor About 3 mins	n Ave toward US-20 W/Por	t of Albany	go 1.2 mi total 11.0 mi
(20) ⁶ .	Continue onto US-20 W About 1 min			go 0.3 mi total 11.3 mi
7.	Turn left at New Scotland Ave Destination will be on the right About 1 min			go 0.3 mi total 11.6 mi
3 43	New Scotland Ave, Albany, NY 1	2208		

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2010 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

15.0 CERTIFICATION

I have read and understand the above Health a have any questions, I can ask my Field Team L	
Employee name	
Signed	
Date	

JACKSON DEMOLITION SERVICE, INC. SAFETY PLAN

BASF

Rennselaer, NY

PROJECT SIGN-OFF SHEET

SITE ORIENTATION MEETING ATTENDEES:

Name (print)	Signature
Name (print)	Signature

APPENDIX A

COMMUNITY AIR MONITORING PLAN

Building Demolition Project BASF Corporation Rensselaer Facility Rensselaer, New York

Prepared for

BASF CORPORATION 100 Campus Drive Florham Park, New Jersey

ROUX ASSOCIATES, INC.

Environmental Consulting & Management



209 Shafter Street, Islandia, New York 11749 ♦ 631-232-2600

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APPENDIX

A. NYSDOH Generic Community Air Monitoring Plan

1.0 INTRODUCTION

This Community Air Monitoring Plan (CAMP) was prepared by Roux Associates, Inc. (Roux Associates) for the demolition of buildings located in the BASF Corporation (BASF), Rensselaer, New York facility (Site).

This project is required to comply with this CAMP during all demolition activities. Specifically, this CAMP outlines the air quality monitoring procedures to be followed during building demolition activities to protect the downwind community (i.e., offsite receptors, including residents and workers) from potential airborne contaminant releases that may result from the project demolition activities. This CAMP is consistent with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (included as Appendix A).

2.0 BUILDING DEMOLITION SCOPE OF WORK

This project includes the complete demolition and removal of all aboveground structures, with the exception of Building 39 (warehouse).

Subsurface foundations, footings and subsurface soils will not be disturbed as part of this scope of work. All building materials have been previously characterized for waste disposal. During demolition activities, the demolition contractor will segregate the waste based on the precharacterization results. Building materials either will be transported to the appropriate offsite disposal facility or will be crushed and re-used onsite as fill (e.g., to fill in voids created by below-grade basements and foundations).

3.0 AIR MONITORING PROCEDURES FOR DEMOLITION ACTIVITIES

The following section describes the specific CAMP monitoring procedures for particulates.

3.1 Particulate Monitoring

The air will be monitored during demolition activities in real-time. Air monitoring for particulates (i.e., dust) will be performed continuously during demolition activities using both air monitoring equipment and visual observations.

3.1.1 Site Perimeter Air Monitoring

Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM₁₀) and capable of integrating (averaging) over periods of 15 minutes or less, at a minimum, will be set up at one upwind (background) and one downwind location, at heights approximately four feet to five feet above land surface (i.e., the breathing zone). In addition, a third air monitoring station will always be established near the fence line between the Site and the Albany Molecular property to the north. This equipment will log the 15-minute average concentrations for subsequent downloading and reporting. An audible alarm on the downwind particulate monitoring device and the device situated on the fence line between the Site and Albany Molecular will be set at 90 micrograms per cubic meter (μ g/m³) above the background level (i.e., the upwind location). Upwind concentrations will be measured at the start of each workday and periodically throughout the day thereafter to establish background conditions. The particulate monitoring equipment will be calibrated at the start of each day and as necessary throughout the day.

The CAMP coordinator will record the wind direction and speed as described below. These readings will allow the CAMP coordinator to ensure that CAMP equipment is located appropriately based upon the wind direction.

The monitoring results will be compared to the following:

If the downwind PM_{10} particulate level is $100 \,\mu g/m^3$ greater than background (upwind perimeter) for the 15-minute period, or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work may continue with dust suppression techniques, provided that downwind PM_{10} particulate levels do not exceed $150 \,\mu g/m^3$ above the upwind level, and provided that no visible dust is migrating from the work area.

• If, after implementation of dust suppression techniques, downwind PM_{10} particulate levels are greater than $150 \, \mu g/m^3$ above the upwind level, demolition procedures will be reevaluated and changes initiated to reduce particulate levels to less than $150 \, \mu g/m^3$ above background conditions and to prevent visible dust migration, including temporarily stopping work if necessary.

3.1.2 Building Perimeter Air Monitoring

In addition to Site air monitoring locations described in Section 3.1.1, air monitoring locations will be established around the perimeter of individual buildings that are being demolished.

Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM₁₀) and capable of integrating (averaging) over periods of 15 minutes or less, at a minimum, will be set up at four locations (i.e., north, south, east and west) at heights approximately four feet to five feet above land surface (i.e., the breathing zone) around the perimeter of a building that is undergoing demolition. This equipment will log the 15-minute average concentrations for subsequent downloading and reporting. Audible alarms on the devices will be set at 90 micrograms per cubic meter (μ g/m³) above the background level (i.e., Site perimeter upwind location).

3.2 Meteorological Data

Meteorological data consisting of wind speed, wind direction, temperature, and barometric pressure will be recorded at a minimum of three times each day. These results will be utilized to position the particulate monitoring equipment in appropriate upwind and downwind locations. A Davis Corporation wireless instrument station (or equivalent) will be used to collect all meteorological monitoring data.

3.3 Potential Suppression Techniques

If the integrated particulate level at the downwind location exceeds the upwind level by more than $100 \,\mu\text{g/m}^3$ at any time during demolition activities, then dust suppression techniques will be employed. The following techniques, or others, may be employed to mitigate the generation and migration of fugitive dusts:

- Misting water onto the building surfaces during demolition, equipment, and haul roads; and/or
- Limiting the size of the work area.

Work may continue with dust suppression techniques, provided that downwind PM_{10} levels are not more than 150 $\mu g/m^3$ greater than the upwind levels.

If visible dust is generated by excavation activities and migrates to downwind locations, but is not detected by the monitoring equipment at or above the action levels, dust suppression techniques such as those listed above will be employed as needed.

If dust suppression techniques do not lower particulates to below $150\,\mu\text{g/m}^3$ or visible dust persists, additional measures, including temporarily stopping work if necessary, will be implemented to remedy the situation.

All air monitoring data and the locations of monitoring equipment will be recorded in the onsite files.

APPENDIX A

NYSDOH Generic Community Air Monitoring Plan

New York State Department of Health Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Page 1 of 3

Periodic monitoring for VOCs will be required during <u>non-intrusive</u> activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

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

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

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

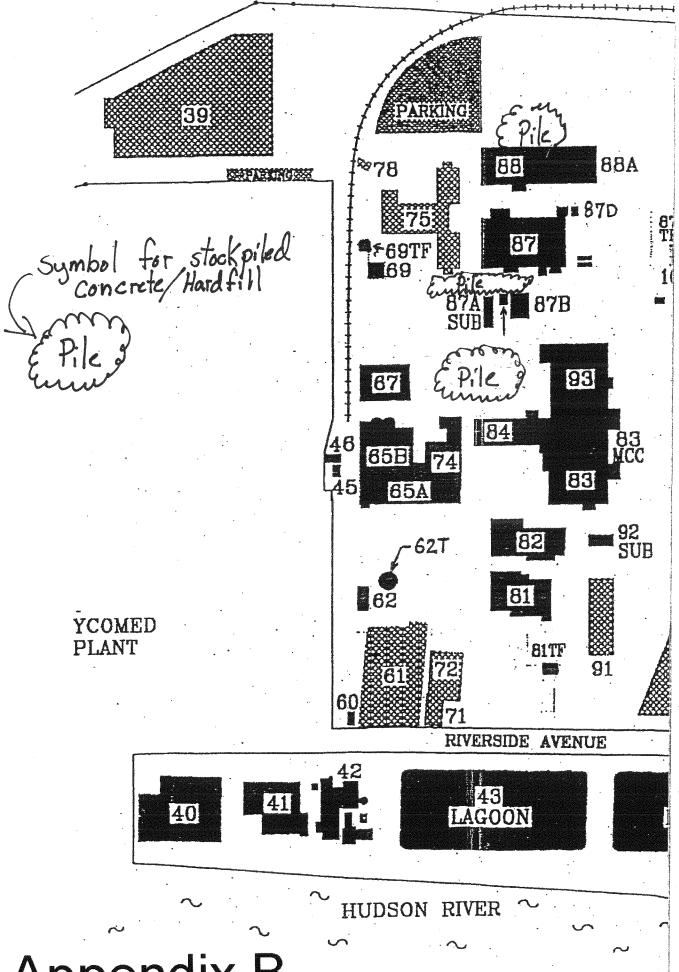
Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000

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Appendix B