ADMINISTRATIVE RECORD

FORT ORANGE PAPER

CASTLETON-ON-HUDSON, RENSSELAER COUNTY, NEW YORK

Prepared for:

U. S. Environmental Protection Agency, Region II
Removal Action Branch
Edison, New Jersey 08837

Prepared by:

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Edison, New Jersey 08837

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Administrative Records in Local Repositories

The "Administrative Record" is the collection of documents which form the basis for the selection of a response action at a Superfund site. Under Section 113(k) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), the EPA is required to establish an Administrative Record available at or near the site.

The Administrative Record file must be reasonably available for public review during normal business hours. The record file should be treated as a non-circulating reference document. This will allow the public greater access to the volumes and also minimize the risk of loss or damage. Individuals may photocopy any documents contained in the record file, according to the photocopying procedures at the local repository.

The documents in the Administrative Record file may become damaged or lost during use. If this occurs, the local repository manager should contact the EPA Regional Office for replacements. Periodically, the EPA may send supplemental volumes and indices directly to the local repository. These supplements should be placed with the initial record file.

The Administrative Record file will be maintained at the local repository until further notice. Questions regarding the maintenance of the record file should be directed to the EPA Regional Office.

The Agency welcomes comments at any time on documents contained in the Administrative Record file. Please send any such comments to Andrew Confortini, On-Scene Coordinator, Removal Action Branch, U.S. EPA Region II, 2890 Woodbridge, New Jersey, 08837.

For further information on the Administrative Record file, contact Andrew Confortini at (732) 906-6827.

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Title: Abstract of Document Contents
Category: Document Category/Section of Administrative Record File
Author: Writer and Affiliation
Recipient: Addressee or Public and Affiliation, if applicable
Date: When Document was Created or Transmitted

Note: Items in the Administrative Record are for public access, and should be removed from the file only for copying. The cost of reproduction of the documents in the file is the responsibility of the person requesting the copy.

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INDEX OF DOCUMENTS

Document #: FOP 1. 1001 - FOP 1. 1002
Title: Removal Action Fact Sheet - Fort Orange Paper Company
Category: Site Identification
Author: Andrew Confortini, On-Scene Coordinator, Removal Action Branch, United States Environmental Protection Agency, Region II, Edison, NJ 08837
Recipient: Public
Date: September 2004

Document #: FOP 2. 1001 - FOP 2. 1059
Title: Action Memorandum
Category: Removal Response
Author: Andrew Confortini, On-Scene Coordinator, Removal Action Branch, United States Environmental Protection Agency, Region II, Edison, New Jersey, 08837
Recipient: George Pavlou, Director, Removal and Emergency Preparedness Program, United States Environmental Protection Agency
Date: August 2, 2004

EPA REGIONAL GUIDANCE DOCUMENTS

The following documents are available for public review at the EPA Region II Field Office, 2890 Woodbridge Avenue, Edison, New Jersey during regular business hours.

* Glossary of EPA Acronyms.

* Superfund Removal Procedures--Revision #3. OSWER Directive 9360.0-03B, February 1988.

* Hazardous Waste Operations and Emergency Response.
  Notice of Proposed Rule making and Public Hearings.
  29 CFR Part 1910, Monday, August 10, 1987.

* Guidance on Implementation of Revised Statutory Limits on Removal Action.
  OSWER Directive 9260.0-12, May 25, 1988.

* Redelegation of Authority under CERCLA and SARA.
  OSWER Directive 9012.10, May 25, 1988.

* Removal Cost Management Manual.
  OSWER Directive 9360.0-02B, April, 1988.

* Field Standard Operating Procedures (FSOP).
  #4 Site Entry.
  #6 Work Zones.
  #8 Air Surveillance.
  #9 Site Safety Plan.

* Standard Operating Safety Guides -- U.S. EPA Office of Emergency and Remedial Response, July 5, 1988.

* CERCLA Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund).

* SARA: Superfund Amendments and Reauthorization Act of 1986.

* NCP: National Oil and Hazardous Substances Pollution Contingency Plan. - Publication No. 9200.2-14.

* Guidance on Implementation of the "Contribute to Efficient Remedial Performance" Provision - Publication No. 9360.0-13.

Additional Guidance Documents are listed below and are available for review at the EPA Region II Removal Records Center.

* The Role of Expedited Response Actions (EPA) Under SARA - Publication No. 9360.0-15.

* Guidance on Non-NPL Removal Actions Involving Nationally Significant or Precedent Setting Issues - Publication No. 9360.0-19.

* ARARS During Removal Actions - Publication No. 9360.3-02.

* Consideration of ARARS During Removal Actions -Publication No. 9360.3-02FS.

* Public Participation for OSCs - Community Relations and the Administrative Record - Publication No.9360.3-05.

* Superfund Removal Procedures - Removal Enforcement Guidance for On-Scene Coordinators - Publication No. 9360.3-06.

* QA/QC for Removal Actions - Publication No. 9360.4-01.

* Compendium for ERT Air Sampling Procedures - Publication No. 9360.4-05.

NOTICE OF PUBLIC AVAILABILITY

The U.S. Environmental Protection Agency (EPA) announces the availability for public review of files comprising the Administrative Record for the selection of a Removal Action at the Fort Orange Paper Site in Castleton-On-Hudson, Rennselaer County, New York. The EPA seeks to inform the public of the availability of the record file at the repositories specified below and to encourage the public to comment on documents as they are placed in the record file.

The administrative record file includes documents which form the basis for the selection of a removal action at this site. Documents now in the record file include: a referral letter, sampling plans, the Action Memorandum, a fact sheet, and EPA regional guidance documents list. Other documents may be added to the record files as site work progresses. These additional documents may include other technical reports, sampling data, comments submitted by interested persons, and the EPA responses to significant comments.

The administrative record files are available for review during normal business hours at:

Castleton Public Library
85 South Main Street
Castleton-On-Hudson, New York 12033

U.S. EPA Region II
Removal Action Branch
Building 209
2890 Woodbridge Ave.
Edison, NJ 08837-3679
(732) 321-4454

Additional guidance documents and technical literature are available at the following location:

U.S. EPA, Region II
Removal Records Center
2890 Woodbridge Avenue
Building 205
Edison, NJ 08837-3679
Phone (732) 321-6980

Written comments on the Administrative Record should be sent to:

Andrew Confortini, On-Scene Coordinator
Removal Action Branch
U.S. Environmental Protection Agency, Region II
2890 Woodbridge Avenue
Edison, New Jersey

REMOVAL ACTION FACT SHEET
FORT ORANGE PAPER COMPANY
CASTLETON-ON-HUDSON, RENSSELAER COUNTY, NEW YORK

INCIDENT DESCRIPTION:

The Fort Orange Paper Company (FOP) Site is located in the Village of Castleton-on-Hudson, Rensselaer County, New York. The 103-acre FOP property includes eight large brick and wood buildings, the oldest being approximately 146 years old. Former operations within these structures included a paper machine area, printing department, an electrical shop, maintenance shop, stripping department, glue department, oil shed, lube shop, polymer blending laboratory, auto shop, locomotive garage and boiler house. In addition, operations at the Site included the utilization of a 2-million gallon wastewater treatment lagoon.

On November 7, 2003, the United States Environmental Protection Agency (EPA) Region II received a request from the New York State Department of Environmental Conservation (NYSDEC) to evaluate the FOP facility, for a possible Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal action.

On December 2, 2003, EPA began its evaluation of the facility. Based upon the size of the facility and nature of observed chemical hazards, a subsequent inspection was conducted on February 18, 2004. The purpose of this visit was to: 1) obtain representative insulation material samples to determine the presence of asbestos-containing materials; 2) evaluate indoor air quality for the presence of volatile organics; and 3) to gather information regarding the types and quantities of other hazardous materials (i.e.-solvents, oils, paints, aerosols).

CONTAMINANTS:

Laboratory analytical results from samples collected of the various insulation materials confirmed the presence of asbestos in concentrations ranging from 5.9% to 59.3%. In addition, the inspection also identified a mercury spill upon the second floor of the former boiler house and dumping area for disgarded transite piping.

THREAT:

The substances described above are CERCLA designated hazardous substances and Resource Conservation and Recovery Act (RCRA) hazardous wastes. The primary concern is the threat of direct contact of these substances to the nearby human population should these and other materials be released into the environment. Persons or the surrounding environment may be exposed to the above-mentioned contaminants via dermal contact, inhalation or inadvertent ingestion.

ACTIONS:

On August 2, 2004, written authorization was granted for the removal of friable asbestos insulation materials located along the exterior portions of the facility structures which continue to deteriorate and be released into the environment. In addition to the exterior asbestos materials, the Action Memorandum also authorized the cleanup of a small mercury spill and the removal of all other containerized hazardous materials. This removal action is the first action being conducted by EPA at this facility. Prior to requesting EPA assistance at this Site, the NYSDEC coordinated the removal of numerous petroleum-related wastes. As a result, NYSDEC arranged for approximately 8,000-gallons of hazardous materials in various sized containers to be removed from the premises.

PRESENT STATUS:

On September 20, 2004, the EPA and its contractors mobilized to the Site to implement the proposed corrective actions. At this time, the anticipated duration for the completion of this work is 4 weeks.

Comments regarding the Fact Sheet should be directed to:

Andrew L. Confortini
On-Scene Coordinator
U.S. EPA, Region II
Removal Action Branch
2890 Woodbridge Avenue
Building 209
Edison, NJ 08837
(732) 906-6827

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

ACTION MEMORANDUM

DATE: AUG

SUBJECT: Request for a CERCLA Removal Action at the Fort Orange Paper Site, Castleton-on-Hudson, Rensselaer County, New York

FROM: Andrew L. Confortini, On-Scene Coordinator
Removal Action Branch

TO: George Pavlou, Director
Emergency and Remedial Response Division

THRU: Richard C. Salkie, Chief
Removal and Emergency Preparedness Program

Site ID#: UT

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action described herein for the Fort Orange Paper Site (Site), located at 1900 River Road, Castleton-on-Hudson, Rensselaer County, New York 12033 (see Figure 1). The propose project ceiling is $284,400, of which $237,000 is for mitigation contracting.

This Action Memorandum will authorize the removal of deteriorated friable asbestos insulation materials located along exterior portions of the facility structures which continue to deteriorate and be released into the environment. This Action Memorandum will also authorize the implementation of Site security measures, the remediation of a mercury spill within the boiler house, and removal of labpack containers.

The Site is not on the National Priorities List (NPL) and there are no nationally significant or precedent-setting issues associated with this removal action.

II. SITE CONDITIONS AND BACKGROUND

The Comprehensive Environmental Response, Compensation, and Liability Information System ID Number for this time-critical removal action is NYD093247062.

A. Site Description

1. Removal site evaluation

On November 7, 2003, the U.S. Environmental Protection Agency (EPA) received a request from the New York State Department of Environmental Conservation (NYSDEC), Division of Hazardous Waste Remediation, to evaluate the Site for a removal action under the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, 42 U.S.C. §§ 9601-9675 (see Attachment A).

On December 2, 2003, On-Scene Coordinators (OSC's) from the Removal Action Branch (RAB) and Response and Prevention Branch (RPB) conducted an initial Site inspection accompanied by representatives from NYSDEC. Based upon the size of the facility and nature of observed chemical hazards, a subsequent inspection with members from the Removal Support Team (RST) was scheduled for February 18, 2004. The purpose of this visit was to: 1) obtain representative insulation material samples to determine the presence of asbestos-containing materials; 2) evaluate indoor air quality for the presence of volatile organics; and 3) to gather information regarding the types and quantities of labpack chemicals. The two-day reconnaissance included entering each of the eight Site structures for the purpose of documenting Site environmental conditions, as reported by NYSDEC. A total of ten insulation material samples were collected and submitted to EMSL Analytical, Inc. of Westmont, New Jersey for Polarized Light Microscopy (or PLM) and Transmission Electron Microscopy (or TEM) bulk asbestos analysis. The samples were collected from those areas where appreciable amounts of suspected asbestos-containing material were evident, either on the exterior ground surface or building floor. The approximate location of each sampling point is provided on Figure 2. Attachment B includes a complete set of all digital photographs taken during this phase of the Site evaluation. The Removal Site Evaluation report is included (without attachments) as Attachment C.

Of the ten samples collected by EPA and RST during the reconnaissance, nine contained asbestos fibers. The total asbestos fiber (chrysotile and amosite) content in each sample ranged from 5.9% to 59.3%. A copy of the complete analytical results package is provided in Attachment D. In addition to the asbestos investigation, EPA and RST personnel identified a mercury spill on the second floor of the boiler house. Based upon the location of this spill, it appears to have been created as result of the removal and/or salvaging of boiler components. Personnel also identified several piles of degraded transite piping within a field north of the main building and along the Moordener Kill and various labpack containers throughout the facility structures.

2. Physical location

The Site is located at 1900 River Road (a.k.a. Route 9J) in Castleton-on-Hudson, Rensselaer County, New York (see Figure 1). The Site covers approximately 103 acres and includes eight separate buildings. These structures are constructed of brick and wood building materials, the oldest building being approximately 146 years old. Former operations within these structures included a paper machine area, printing department, an electrical shop, maintenance shop, stripping department, glue department, oil shed, lube shop, polymer blending laboratory, auto shop, locomotive garage and boiler house. Figure 2 provides a layout of the entire facility in greater detail, as it appeared at the time of inspection. In addition, facility operations also included the utilization of a 125-foot by 200-foot wastewater treatment lagoon. The lagoon is located along the northern perimeter of the Site and is shown in operation on the May 1995 aerial photograph included as Figure 3. The Site is bordered in all directions by residential properties. The closest residential dwelling is a nursing home which is located less than one-tenth of a mile to the southwest of the Site.

The area around the Site is generally rural. The facility is located within a valley bordered along the northern and southern borders by ridges. An estimated 1,283 residents from the Village of Castleton-on-Hudson live within a one-mile radius of the Site. Potable water is supplied to the Village of Castleton-on-Hudson via a municipal water supply. The municipal well field is located approximately twelve miles upgradient of the Site.

The Moordener Kill flows through the Site. The majority of the facility buildings and operations were located south of this waterway. The Moordener Kill drains directly into the Hudson River which is located approximately one-half mile west of the Site. Surface water runoff from the facility discharged directly into the Moordener Kill. The Moordener Kill is a New York State Class C trout stream waterway in the area of the Site. According to the Fort Orange Paper Co. Best Management Practices (BMP) document submitted to NYSDEC May 25, 2001, facility floor drains and sumps, including sanitary wastes, were treated in an on-Site wastewater treatment plant before being discharged into the Moordener Kill. The on-Site wastewater treatment consists of a primary clarifier that discharges into one of two aerated lagoons that were constructed to buffer and equalize any releases from the facility prior to discharging into the Moordener Kill.

At this time, no Site-specific information is available regarding the groundwater beneath the property. Due to the proximity of the Hudson River and the Moordener Kill, perched groundwater is anticipated to be relatively shallow, less than ten feet below grade.

Based upon information contained in the BMP documents dated May 25, 2001 and October 1992, it appears that Fort Orange Paper Co. disposed of non-putrescible wastes (strapping, string, broken wooden pallets, etc.) and coal ash solids generated in the boiler house

in an on-Site landfill. The office and putrescible wastes were hauled off-Site and disposed of in a local landfill. The exact location of the on-Site landfill is currently being investigated.

3. Site characteristics

The Site is the location of a former paper manufacturer which operated from 1858 until the plant closed in February 2002. An investigation into the nature of facility operations during its 144-year history is currently underway. The most recent operations involved the manufacture of clay-coated folding box board out of recycled paper for use in cereal boxes and other consumer packaging. A portion of the finished products produced involved the use of lithograph dyes. According to local press reports, the facility had a daily output of 140 tons per day (tpd) of paperboard derived from waste paper.

Power to the facility was cut off due to non-payment of bills causing a cessation of operations at the Site on February 28, 2002. John P. Hay was reportedly the President of Fort Orange Paper Company at the time it ceased operations.

Since the closure of the Site facility, extensive salvage operations have occurred there. According to the State, a New York City-based factoring company, Millberg Factors, either salvaged or arranged for the salvage of various pieces of equipment at the facility. It appears that in the process of the salvage operations, asbestos-containing materials were damaged and/or disbursed throughout the buildings and main plant area grounds and that the mercury spill may have been caused.

4. Release or threatened release into the environment of a hazardous substance, or pollutant, or contaminant

The following hazardous substances have also been identified in various containers located throughout the Site:

Substances Identified	Statutory Source for Designation as a Hazardous Substance
Ammonium chloride	CWA § 311(b)(4)
Ferric chloride	CWA § 311(b)(4)
Perchloroethylene	CWA § 307(a), RCRA § 3001
Phosphoric acid	CWA § 311(b)(4)
Potassium hydroxide	CWA § 311(b)(4)
Sodium hydroxide	CWA § 311(b)(4)
Mercury	CWA § 307(a); CAA § 112; RCRA § 3001
Asbestos	CWA § 307(a); CAA § 112

In the statutory sources cited above, CWA § 311(b)(4) indicates that the source is Section 311(b)(4) of the Clean Water Act, CWA § 307(a) indicates that the source is

Section 307(a) of the Clean Water Act, CAA § 307 (a), and RCRA § 3001 indicates that the source is Section 3001 of the Resource Conservation and Recovery Act (RCRA).

These hazardous substances are acutely and chronically toxic, corrosive, reactive, and/or flammable. The potential health effects from these compounds are identified below:

Potential Health and Toxicological Effects

Chemical	Irritant	Kidney/ Liver Damage	Dermal/ Eye Effects	Blood/ Cardio Damage	Respiratory Effects	CNS Damage
Ammonium chloride					x	x
Ferric chloride	x	x	x		x	
Perchloroethylene	x	x	x		x	x
Phosphoric acid	x		x		x	
Potassium hydroxide	x		x		x	
Sodium hydroxide	x		x		x	
Mercury	x		x		x	x
Asbestos					x	

The environmental threats posed by these materials include airborne release and the potential for migration of contamination into the surface water and groundwater. Numerous events could trigger releases, but the chief concerns are fire, trespassers, and weather conditions. Precipitation can, over time, further erode the asbestos-containing material (ACM) presently outside of the buildings and result in runoff carrying fibers into the soil and migrating off-Site. Followed by dry conditions, the fibers could then become airborne from the soil.

Hazardous materials have been released at the Site. The manner in which the remaining structures are open to the elements (e.g., broken walls, roofs, and windows) and the potential for additional portions of the structure to collapse may result in the release of additional hazardous materials. The sampling results confirmed that asbestos has been released at the Site. During Site reconnaissance, significant quantities of friable asbestos were observed on the floors within many of the facility structures as well as on the ground surface immediately outside the boiler room. As a result of the dilapidated condition of the Site structures, the asbestos material has deteriorated and migrated.

The ten insulation material samples collected on February 18, 2004 during the EPA/RST Site inspection indicate the presence of asbestos in nine of those samples ranging from 5.4 to 59.4%.

A copy of all analytical results are provided as Attachment C. Sample locations are illustrated on Figure 2. The fiber types were identified as either chrysotile or amosite. Sample FOP-PD-06 (54.7% chrysotile) was collected from pipe insulation located within the collapsed portion of the printing department. Due to the roof collapse, some of this material is exposed to the environment. Outdoor sample, FOP-CY-02, was found to contain 7.4% chrysotile. In both cases, a portion of this insulation material has already weathered to the point where it has fallen off the piping.

Eight samples were collected from various areas within the Site structures. Due to many factors, including the lack of heat in the facility, the doors being left open, vandals breaking the majority of the building windows, and salvage activities, much of the ACM indoors has become weathered or damaged. In many cases, the ACM have fallen off piping and can be found on the building floors. This material has become extremely friable due to exposure to the elements. High winds, common at the Site, can easily cause asbestos fibers to be separated from their source and become airborne. Due to the local topography and the relative arrangement of facility structures on the Site, the channeling effect of wind and air currents between these building may increase the dispersion of asbestos fibers.

The releases from the Site could impact unprotected persons on-Site through direct contact or inhalation exposure. The potential exists for trespassers to come into contact with the hazardous materials during salvage operations, which could impact persons in the vicinity of the Site, especially within the residential areas.

When asbestos is friable, it is designated as a CERCLA hazardous substance under 40 CFR § 302.4. Friability is the ease with which a material can be crumbled, pulverized or reduced to powder when dry, by hand pressure. The more friable the material, the greater the potential for fiber release and contamination. It is reported that, once released, asbestos fibers have the ability to remain entrained in the air for extensive periods.

Corrosive liquids in drums are found throughout many of the facility structures. A complete summary of these materials is provided as Attachment E.

5. NPL status

The Site is not a NPL site. A Hazard Ranking System (HRS) package is not being prepared.

B. Other Actions to Date

1. Previous actions

There have been no Federal CERCLA actions taken at the Site. Immediately prior to and concurrent with EPA activities, NYSDEC had removed a variety of hazardous materials from the Site. The scope of NYSDEC work involved contacting the manufacturers of materials found on-

Site to determine if they would remove their products from the Site. As a result, NYSDEC arranged for approximately 8,000 gallons of hazardous materials in various sized containers to be removed from the premises. In addition, NYSDEC contracted a waste oil recycler to remove the 75 55-gallon drums containing waste oil. The removal was 80% completed when persistent freezing weather conditions forced the operations to cease until more favorable weather was present. Approximately 50 containers (ranging from 5-gallon pails to 55-gallon drums) containing waste oils, lube oils, and grease remain at the Site and may or may not be removed by NYSDEC.

2. Current actions

Currently, no actions are being taken at the Site.

C. State and Local Authorities' Role

1. State and local actions to date

NYSDEC has requested that EPA perform a CERCLA emergency response action at the Site.

2. Potential for continued State/local response

At this time, it is not clear whether NYSDEC will remove from the Site the remaining waste oils, lube oils, and grease referenced above in the previous actions section. Other than this potential additional removal activity by NYSDEC, no further State response action is expected at the Site.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to the Public Health or Welfare

Hazardous substances, pollutants or contaminants present at the Site represent a threat to the public health and welfare as defined by Section 300.145(b)(2) of the National Contingency Plan (NCP), in that there is a high potential for releases to continue to occur due to exposure to the elements, past salvaging operations, poor housekeeping and the deteriorated condition of the containers. Factors that support the removal action at this Site include:

1. Actual or potential exposures to nearby human populations, animals, or the food chain from hazardous substances, pollutants, or contaminants [40 CFR § 300.415(b)(2)(i)];

There is a potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants (40 CFR §300.415(b)(2)(i)). The primary potential routes of exposure to asbestos at the Site are inhalation and ingestion, while the primary

potential routes of exposure to the drummed hazardous materials are direct contact and inhalation. Individuals that access the Site may be exposed to the asbestos, the spilled mercury, and the drummed hazardous materials that are in the buildings or rubble piles. Individuals coming into contact with both the asbestos and hazardous materials may transport the materials off-Site on their clothing and/or shoes, thus potentially impacting others.

Asbestos is a general term used to describe minerals that tend to form fibers when they are broken. These minerals are formed under conditions of very high heat and pressure deep within the earth, and they are resistant to the types of temperatures and pressures found in our surface environment. Because their chemical composition is unchangeable, an asbestos mineral will always break into fibers. Large fibers have the potential to break into smaller ones, which eventually results in its reduction to microscopic size. Because of their small size, shape, and lightness, these fibers act are more like a gas than a dust.

Chrysotile is a mineral containing long, flexible fibers that, due to their electron structure, tend to stick to things. This places them in a very good position to become re-entrained. Amosite is a mineral whose fibers are finely divided, harsh, and brittle and are also easily re-entrained.

The most significant human exposure pathway for asbestos is the inhalation of respirable asbestos fibers. The ingestion of fibers may also be an exposure pathway of concern for workers or children who may come into contact with Site materials. In addition to environmental exposures, the improper handling of work clothing from on-Site workers may also pose a danger. Workers can carry the fibers home in their clothing and hair, and expose other family members.

Asbestos exposure may cause two primary classes of health effects. The first is asbestosis, a non-malignant disease characterized by a progressive scarring of the lung and pleura. This condition progresses slowly over many decades, and may continue even after the asbestos exposure has ceased. As microscopic scarring builds up, the lungs become stiff and restricted with thickening in the walls of the breathing spaces. The stiffening of the lungs, when severe, can make it difficult to breathe. The other major class of asbestos-related health effects is mesothelioma and lung cancer which can occur after minimal exposure to asbestos.

There is a considerable time interval between asbestos exposure and when lung cancer, mesothelioma, or the other asbestos-related cancers are seen. This latency period may vary from twenty to forty years, although some cases may occur earlier.

The current OSHA standard for asbestos in the workplace is 0.2 fibers per cubic centimeter of air as an eight-hour time-weighted average. According to the National Institute for Occupational Health and Safety, evaluation of all available human data provides no evidence for a threshold or for a "safe" level of asbestos exposure.

2. **Hazardous substances, or pollutants, or contaminants in drums, barrels, tanks or other bulk storage containers, that may pose a threat of release [40 CFR § 300.415(b)(2)(ii)];**

NYSDEC is currently completing its work at the Site. The primary focus of NYSDEC's activities has involved coordinating with the suppliers of various petroleum and related materials to remove their products from the premises. As noted in the previous actions section above, a substantial amount of cleanup work has been completed by NYSDEC. However, it is not clear at this time whether approximately 50 containers of waste oils, lube oils, and grease will be addressed by NYSDEC. Many of these containers are located along exteriors portions of the building and are exposed to the elements and trespassers.

3. **High levels of hazardous substances, or pollutants, or contaminants may exist in soils largely at or near the surface, that may migrate [40 CFR § 300.415(b)(2)(iv)];**

Asbestos may migrate off-Site by wind carrying airborne asbestos. NYSDEC has indicated that high winds are common at the Site due to proximity to the Hudson River and Site elevation. Channeling of winds between the buildings was noted by the OSC during a Site visit on February 18, 2004. The drummed hazardous materials present at the Site exist in various sized drums that are beginning to rust and corrode due to exposure to the elements.

4. **Weather conditions exist that may cause hazardous substances, or pollutants or contaminants to migrate or be released [40 CFR § 300.415(b)(2)(v].**

Precipitation events may transport asbestos off-Site via surface water runoff; this asbestos can become airborne during dry conditions subsequent to a precipitation event. Precipitation events may potentially contribute to the erosion of the drummed containers, causing the drums to leak their contents; the hazardous materials may then be transported off-Site as the precipitation drains off the Site. This could impact persons in the vicinity of the Site.

5. **There is no other appropriate Federal or State response mechanisms available to respond to the situation at the Site [40 CFR § 300.415(b)(2)(vii)].**

NYSDEC has requested that EPA abate the threats to public safety and the environment at the Site, with regard to both asbestos and the containerized hazardous materials.

B. **Threats to the Environment**

Based on the available information, there is a threat to the environment from the asbestos, although it should be noted that an exposure scenario does exist for the wildlife that use the area. Entry of asbestos fibers to surface water is possible through the Moordener Kill, which flows through the Site.

A potential threat to the environment exists from the containerized hazardous materials present throughout the Site. If the materials in the drums were released during salvaging operations or if a building were to collapse, the potential exist for the ground water beneath the Site to be impacted. The potential also exists for surface runoff to flow into the Moordener Kill, a designated trout spawning stream.

IV. ENDANGERMENT DETERMINATION

Actual or potential releases of hazardous substances at or from the Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare and the environment.

V. PROPOSED ACTIONS AND ESTIMATED COST

A. Proposed Actions

1. Proposed action description

The activities proposed under this Action Memorandum are to address immediate threats to the public health, or welfare, or the environment. The following summarizes the activities to be completed during this removal action:

i. Institute Site security (warning signs/securing access points) as a means of limiting access and thereby preventing direct contact with the Site contaminants;

ii. The removal and staging of all friable asbestos present on piping and/or components of the heating system, which are located in exterior portions of the facility. These activities will primarily focus on the boiler house and adjacent structures and the collapsed portion of the print shop (the asbestos within the interior of the building will not be addressed because it is not presently being released to the environment);

iii. The segregation, sampling, and removal of labpack containers found throughout the various Site structures;

iv. The cleanup and disposal of the mercury spill identified in the boiler house;

v. The investigation of the on-Site landfill and wastewater treatment lagoon; and

vi. Removal and disposal of hazardous substances that threaten human health that are identified during the course of the removal action.

The activities proposed under this Action Memorandum will address the threats to the public health or welfare, or the environment consistent with CERCLA. The proposed removal action will secure the Site and allow for the removal of deteriorated friable ACM that is being released to the environment, labpack items, and the mercury spill. This action will help to stabilize the Site and reduce the threat of a release of asbestos fibers, hazardous liquids, and mercury, as well as reduce the potential for direct contact.

2. Contribution to remedial performance

The proposed removal action at the Site is consistent with the requirements of Section 104(a)(2), of CERCLA, which states that "any removal action undertaken ... should, to the extent practicable, contribute to the efficient performance of any long term remedial action with respect to the release of threatened release concerned." Since any remedial action undertaken would encompass the work items in this removal action, the cleanup effort is consistent with any future remedial work.

3. Description of alternative technologies

The selected removal action of securing the Site, removing deteriorated friable ACM, labpack containers, and mercury spill has been determined to be the appropriate method at the Site based upon the criteria of effectiveness, implementability, and cost.

4. Environmental Evaluation/Cost Analysis (EE/CA)

Due to the time-critical nature of this removal action, an EE/CA will not be prepared.

5. Applicable or Relevant and Appropriate Requirements (ARARS)

Federal ARARS that are within the scope of this removal action, which pertain to the cleanup and disposal of hazardous waste, will be identified and addressed to the extent possible. The Federal ARAR preliminarily identified for this removal action is the Clean Air Act, 42 U.S.C. §§ 7401-7671q and the regulations promulgated thereunder.

6. Project schedule

Once the Action Memorandum has been approved, immediate arrangements will be made to coordinate the securing of the Site. It is estimated that four to six weeks will be required for an asbestos removal subcontract to be awarded and the work to be completed.

B. Estimated Costs

The estimated costs for the completion of the proposed removal action are summarized below.

Extramural Costs

Regional Removal Allowance Costs:

Total Cleanup Contractor Cost (including 15% contingency)	$ 237,000
Subtotal, Extramural Costs	$ 237,000
Extramural Cost Contingency (20%)	$ 47,400
TOTAL, REMOVAL ACTION PROJECT CEILING	**$ 284,400**

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION DELAYED

Delayed action to address the exposed asbestos containing material will result in an increased potential for exposure to asbestos fibers that may become airborne due to the disturbance by the elements, wildlife, and trespassers. Two additional buildings collapsed due to the weight of snow this past winter, which has further increased the risk of the release of hazardous substances to the environment.

Based upon the corroded condition of several drums remaining at the facility and the lack of proper security at the Site, a delayed action to address the remaining drummed hazardous materials will result in an increased potential for exposure to both human health and the environment.

VII. OUTSTANDING POLICY ISSUES

No known outstanding policy issues are associated with the Site.

VIII. ENFORCEMENT

EPA has initiated a potentially responsible party (PRP) search. Should a PRP be identified and be willing to undertake timely and appropriate corrective action, all or part of the funds requested herein may not be spent. PRPs who appear to have the financial wherewithal to participate in the performance of the removal action, but who decline to do so, may be pursued for cost recovery.

The total EPA costs for this removal action (based on full-cost accounting practices) that will be eligible for cost recovery are estimated to be:

Direct Extramural Cost	$284,400
Direct Intramural Cost	$ 64,800
Subtotal, Direct Costs	$349,200

Indirect Costs (Regional Indirect Cost Rate 28.18% x $349,200)	$ 98,400
Estimated EPA Costs Eligible for Cost Recovery	$447,600

IX. RECOMMENDATION

This decision document represents the selected removal action for the Fort Orange Paper Company Site, located in the Village of Castleton-on-Hudson, Rensselaer County, New York, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Fort Orange Paper Company Site.

Conditions at the Site meet the NCP § 300.415 (b)(2) criteria for a removal action. I recommend your approval of the proposed removal action. The estimated project ceiling if approved will be $284,400, of which an estimated $237,000 is for mitigation contracting. Sufficient funding is available in the current Advice of Allowance to finance this project.

Please indicate your approval and authorization of funding for the Fort Orange Paper Company Site, as per current Delegation of Authority, by signing below.

Approved: _____ Date: 8-3-04
George Pavlou, Director
Emergency and Removal Response Division

Disapproved: _____ Date: _____
George Pavlou, Director
Emergency and Remedial Response Division

cc: (after approval is obtained)
G. Pavlou, ERRD
W. McCabe, ERRD-DD
R. Salkie, ERRD-RAB
J. Rotola, ERRD-RAB
J. Witkowski, ERRD-RAB
G. Zachos, ACSM/O
P. Simon, ORC-NYCSUP
C. Garvey, ORC-NYCSUP
P. Brandt, PAD
R. Manna, OPM-FMB
T. Riverso, OPM-GCMB
T. Grier, 5202G
P. McKechnie, OIG
R. Marino, NYSDEC
A. Raddant, DOI
E. Christman, NOAA
L. Battes, NYSEMO
G. Litwin, NYSDOH
C. Kelly, RST

FIGURE 1

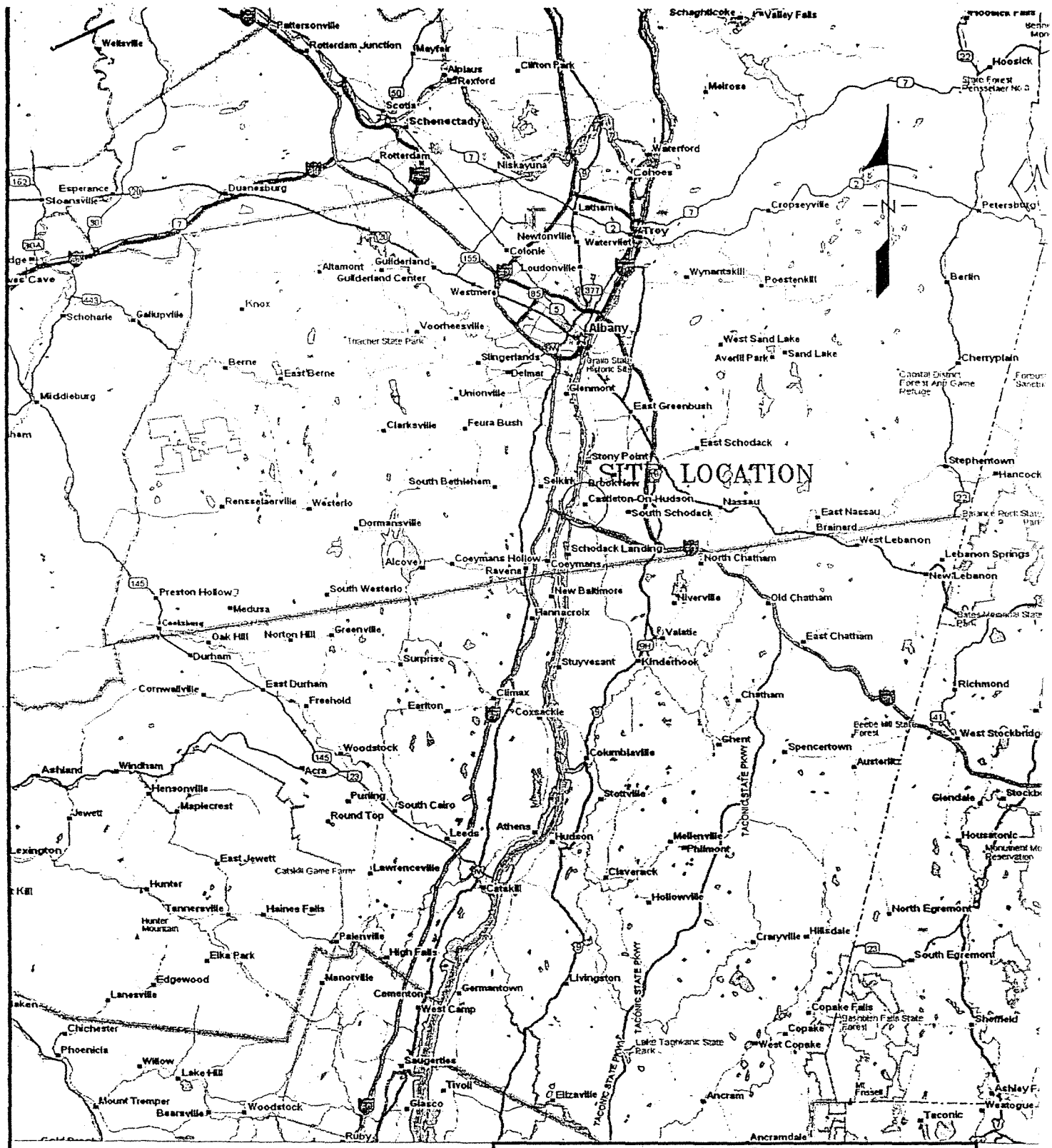


FIGURE 1
SITE LOCATION MAP
FORT ORANGE PAPER CO.
CASTLETON ON HUDSON, NY

US ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM
CONTRACT # 68-W-00-113

Weston Solutions Inc.
FEDERAL PROGRAMS DIVISION

IN ASSOCIATION WITH SCIENTIFIC ENVIRONMENTAL ASSOCIATES, INC.
RESOURCE APPLICATIONS, INC.,
AND INNOVATIVE TECHNOLOGICAL SOLUTIONS INC.

EDITED BY: W. HENSPERGER
EPA OSC: K. CAMP
SITE PROJECT MANAGER: N. GARIBALDI
FILE: D:\DWG\FORTORANGE1

FIGURE 2

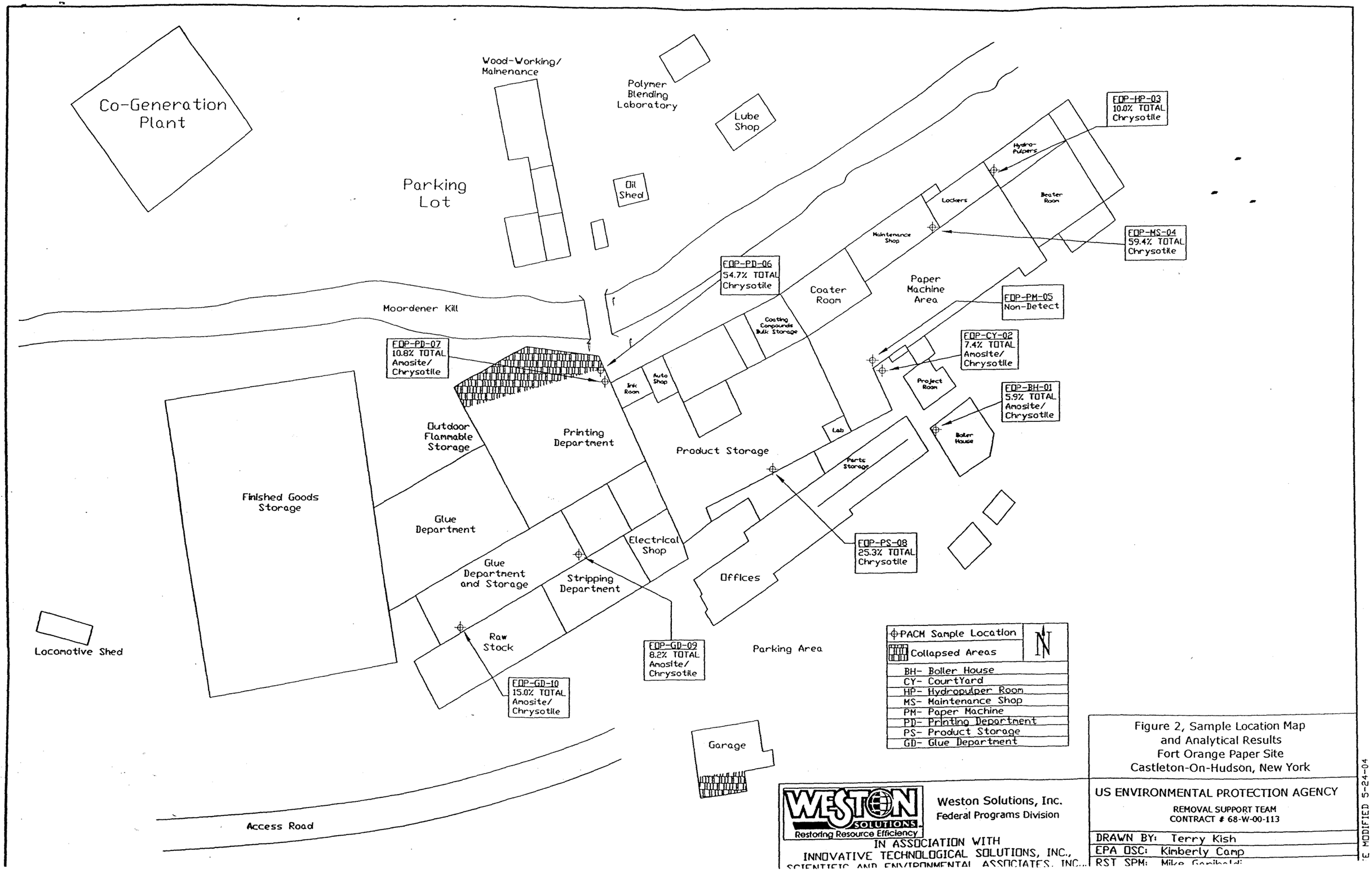


Figure 2, Sample Location Map
and Analytical Results
Fort Orange Paper Site
Castleton-On-Hudson, New York

WESTON SOLUTIONS
Restoring Resource Efficiency

Weston Solutions, Inc.
Federal Programs Division

IN ASSOCIATION WITH
INNOVATIVE TECHNOLOGICAL SOLUTIONS, INC.,
SCIENTIFIC AND ENVIRONMENTAL ASSOCIATES, INC...

US ENVIRONMENTAL PROTECTION AGENCY
REMOVAL SUPPORT TEAM
CONTRACT # 68-W-00-113

DRAWN BY: Terry Kish
EPA OSC: Kimberly Camp
RST SPM: Mike Garibaldi

E MODIFIED 5-24-04

FIGURE 3

FOP 2.101

TerraServer USA

Advanced Find | Info | Download |

Search TerraServer

GO

Home Image

Navigate

View: Aerial Photo

2 km W of Brookview, New York, United States 07 May 1995

1 meter resolution

Map Size: Medium

Advanced Find

Famous Places

Web Services

About

Related Links:

Other Imagery:

Partners:

offroute.com

Waterproof Map

ClickWeather.com

Click to get Weather Forecast Maps for this point

Powered by INFOWeather

House and Home:

Schools, Crime and Demographics for 12033

Image courtesy of the U.S. Geological Survey

Source=165321 Center=(-73.7445,42.5382) 0ms Running Time

FIGURE 3

 | Terms of Use Privacy Statement | Sponsored By

Server=TK2TERRAWEB21

ATTACHMENT A

NYSDEC Referral Letter
Dated November 7, 2003

FOP 2.102

Jim
Kim
George 2.

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support, 11th Floor
625 Broadway, Albany, New York 12233-7020
Phone: (518) 402-9543 • **FAX:** (518) 402-9577
Website: www.dec.state.ny.us

Erin M. Cr
Commissic

November 7, 2003

Mr. George Pavlou
Director
Emergency & Remedial Response Division
United States Environmental Protection Agency, Region II
290 Broadway
New York, New York 10007-1866

RE: Ft. Orange (Paper Manufacturing Facilities)
Castleton (V), Schodack (T), Rensselaer County, New York
Reference: NYSDEC Spill Number 03-00208
Request for Time Critical Removal Action

Dear Mr. Pavlou:

The New York State Department of Environmental Conservation (NYSDEC) hereby requests the United States Environmental Protection Agency (USEPA) perform an appropriate time critical CERCLA emergency response action at the above-referenced site.

The Ft. Orange site is an abandoned paper manufacturing facility in a rural setting adjacent to a trout stream, the Moordener Kill. The site encompasses approximately 50 acres and includes one large main building. The Village of Castleton-on-Hudson is less than one mile away. A recent inspection conducted by the NYSDEC Division of Environmental Enforcement revealed evidence of uncontrolled site access and many containers of chemicals. Facility suppliers have been notified and it is anticipated that interested suppliers will have removed their containers and chemicals from the site by November 7, 2003. The roof has already had failures and another winter will increase the likelihood of continued failures. In addition to the potential of spills caused by damage to the containers from falling roof debris, further spills could be caused from freezing and thawing. These factors make it important to conduct the removal action prior to winter if at all possible. Reactivity potential due to incompatible chemicals has not been evaluated. It is also unknown if any drains or drainage discharge directly into the Moordener Kill. At least one sump is now empty that previously contained liquid.

RECEIVED
2003 NOV 13 AM 11:44
EMERGENCY & REMEDIAL RESPONSE

The NYS Attorney General's Office (Maureen Leary - 518- 474-7154) is preparing a notice of complaint targeted for January 2004. It is advised to contact Ms. Leary for issues of site ownership and an extensive list of chemical suppliers to the facility.

The property owner is unresponsive, and because of the potential environmental threats summarized above and the uncontrolled access to the facility, an emergency removal action is necessary to properly containerize, test, and dispose of these chemicals.

If you have any questions regarding this request, please contact Mr. Allan Geisendorfer, of our Region 4 office, at (518) 357-2390.

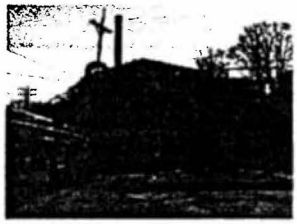
Sincerely,

Robert L. Marino
Director
Bureau of Technical Support

cc: R. Salkie, USEPA, Region II, Edison, NJ
G. Zachos, USEPA Region II, Edison, NJ
B. Sprague, USEPA Region II, Edison, NJ

ATTACHMENT B

Digital Photographs



boiler house on eastern portion of property.

boiler house

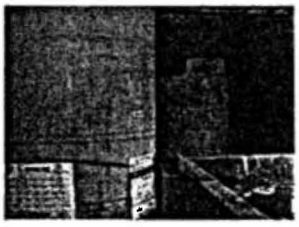
Laboratory

location of USTs

USTs

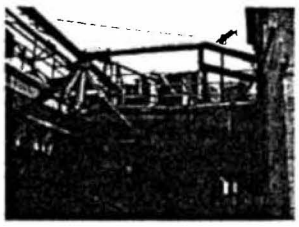
Water treatment room

Water treatment room



water treatment room

waste oil drums.



asbestos coated pipes in courtyard adjacent to boiler house.

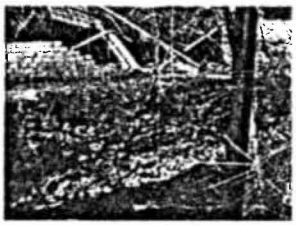
asbestos coated units on boiler house.

asbestos coated piping On boiler house.

newly collapsed portion of bldg as seen from loading docks

collapsed portion of process bldg (Old collapse...occurred Winter of 2003)

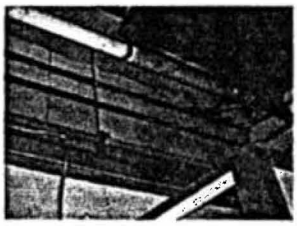
inside gaping hole in collapsed portion



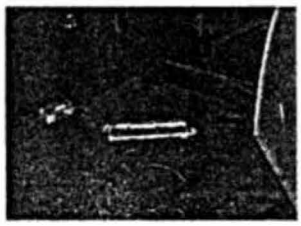
Collapsed portion as seen from across stream

Collapsed portion of building

Woodshop located on northern portion of prop.



asbestos piping in woodshop



asbestos on floor of woodshop

drums containing unknowns in woodshop

2nd lab located on northern portion of property.

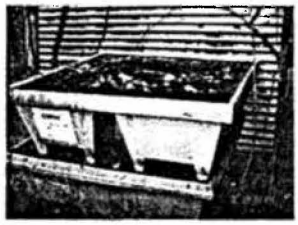
2nd lab located in polymer blending area.

Polymer blending area

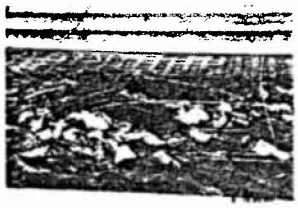
Waste oil drums stored in the flammables storage area located on northern portion of the property.

Sewage Treatment area located on northern portion of property

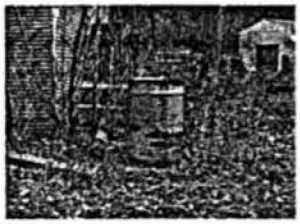
Sewage Treatment area



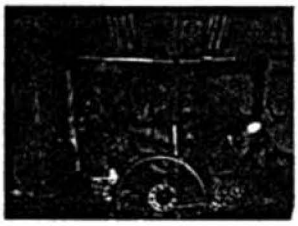
Spill pallets stored outside flammables storage area. Pallets are filled with oily water.



Close up view of spill pallet with oil soaked materials sitting on top.

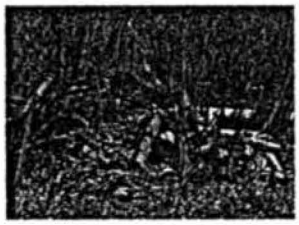


A drum with a bulging bottom is stored outside of the Flammables Storage Area.



Drums and storage pallets potentially containing waste oils.

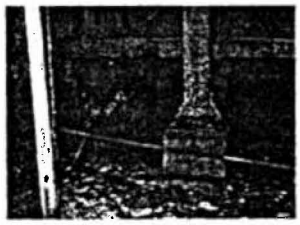
Waste oil drums located in the flammables storage area



Piles of pipe debris noted to potentially contain asbestos. (Located on northern portion of property)

Second pile of pipe debris. Sits adjacent to first pile.

Close up view of the discarded asbestos pipe.



Waste oil drum sitting in processing portion of the building

SITE: Fort Orange Paper Co. **DATE:** December 2, 2003

PHOTO NO: 001 **DIRECTION:** **SUBJECT:** Buildings of Fort Orange Paper Co. as seen from access road.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. **DATE:** December 2, 2003

PHOTO NO: 002 **DIRECTION:** **SUBJECT:** Buildings as seen from access road leading to rear of property.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. **DATE:** December 2, 2003

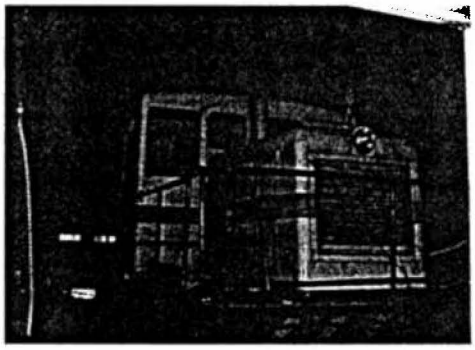
PHOTO NO: 003 **DIRECTION:** **SUBJECT:** Residential properties sit in tree line at property boundaries.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. **DATE:** December 2, 2003

PHOTO NO: 004 **DIRECTION:** **SUBJECT:** Partially collapsed portion of the building

PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co. **DATE:** December 2, 2003

PHOTO NO: 005 **DIRECTION:** **SUBJECT:** Locomotive owned by Fort Orange Paper Co. Located in unattached shed near access road.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. **DATE:** December 3, 2003

PHOTO NO: 006 **DIRECTION:** **SUBJECT:** Evidence of trespassing. NYSDEC responders stated that a vagrant had been living at the property.

PHOTOGRAPHER: K. Camp

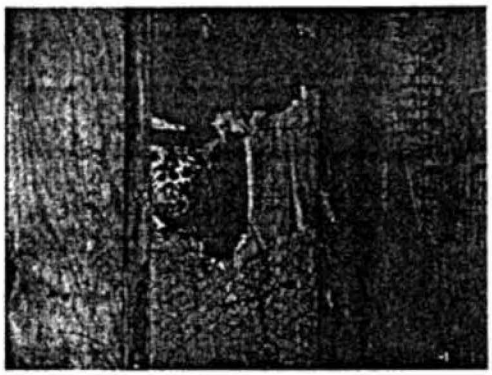
SITE: Fort Orange Paper Co.

DATE: December 2, 2003

PHOTO NO: 007 **DIRECTION:**

SUBJECT: Old process machinery located in Paper Machine Area

PHOTOGRAPHER: K. Camp



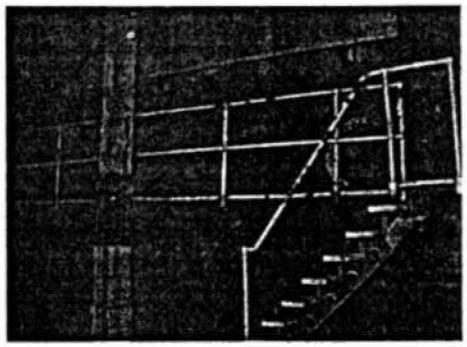
SITE: Fort Orange Paper Co.

DATE: December 2, 2003

PHOTO NO: 008 **DIRECTION:**

SUBJECT: Hydropulper Room. Signs warning of asbestos contamination are posted outside of this room.

PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co.

DATE: December 2, 2003

PHOTO NO: 009 **DIRECTION:**

SUBJECT: Rolling machines present in the Paper Machining Area of the building. Process machinery extends to 2nd story of the building.

PHOTOGRAPHER: K. Camp

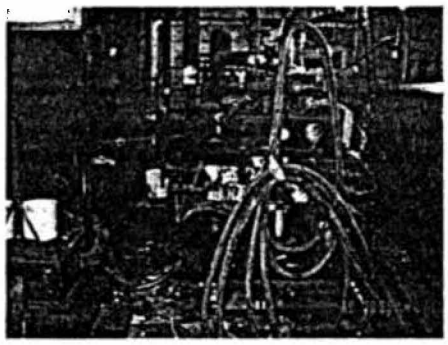
SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 010 **DIRECTION:**

SUBJECT: Aerial overview of site from top of hill present on the site property.

PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 011 **DIRECTION:**

SUBJECT: Photo of asbestos sample BH-01 collected from boiler in the Boiler House. Sample location marked by yellow marker paint.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 012 **DIRECTION:**

SUBJECT: Close up of sample BH-01 collected from potential asbestos piping in Boiler House at 10:20 a.m. **Lab analysis of sample – total asbestos = 5.4%**

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. **DATE:** February 17, 2004

PHOTO NO: 013 **DIRECTION:**

PHOTOGRAPHER: K. Camp

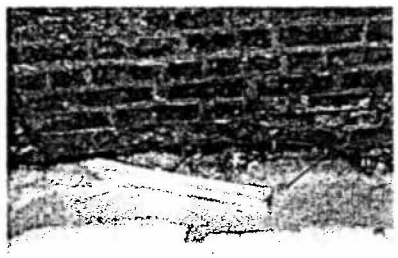
SUBJECT: Potential asbestos piping present on exterior of buildings in the courtyard adjacent to the Boiler House.

SITE: Fort Orange Paper Co. **DATE:** February 17, 2004

PHOTO NO: 014 **DIRECTION:**

PHOTOGRAPHER: K. Camp

SUBJECT: Another view of potential asbestos piping present on exterior of the buildings in the courtyard adjacent to the Boiler House.



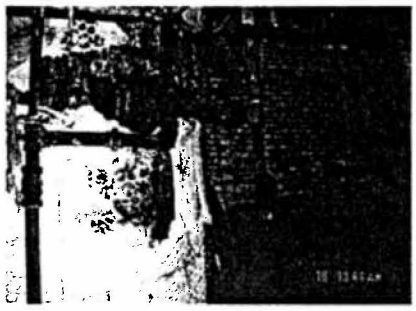
18 10:27AM

SITE: Fort Orange Paper Co. **DATE: February 17, 2004**

PHOTO NO: 015 **DIRECTION:**

PHOTOGRAPHER: K. Camp

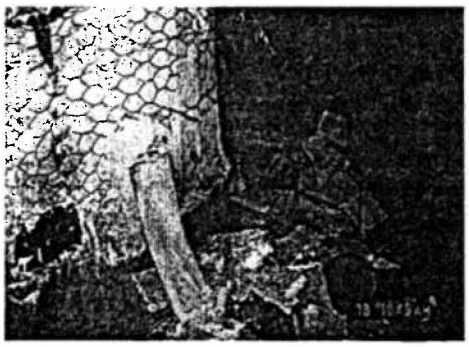
SUBJECT: Potential asbestos pipe wrap that had fallen from piping in courtyard. Pipe wrap debris is lying on ground outside of the buildings in the courtyard. Sample CY-02 collected from this pipe wrap debris at 10:38 a.m. **Lab analysis of sample – asbestos = 7.4%**



SITE: Fort Orange Paper Co. **DATE: February 17, 2004**

PHOTO NO: 016 **DIRECTION:** **SUBJECT:** Photo taken of potential ACM covered machinery present in Hydropulper Room.

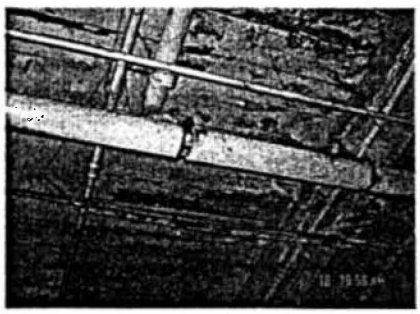
PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co. **DATE: February 17, 2004**

PHOTO NO: 017 **DIRECTION:** **SUBJECT:** Close up of sample HP-03 collected at 10:51 a.m. from machinery in Hydropulper Room. Location of sample marked with yellow marking paint. **Lab analysis of sample – asbestos = 10.0%**

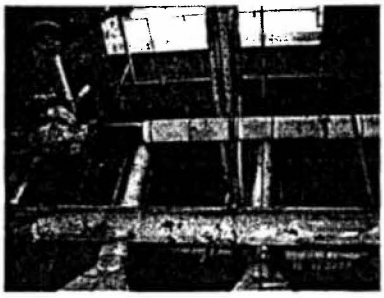
PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 018 DIRECTION: SUBJECT: Potential asbestos piping observed in Paper Machining Area.

PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 019 DIRECTION:

SUBJECT: Potential asbestos piping observed in Paper Machining Area.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 020 DIRECTION:

SUBJECT: Potential asbestos piping observed in Maintenance Shop. Sample collected from pipe wrap at 10:58 am. **Lab analysis of sample – total asbestos = 59.4%**

PHOTOGRAPHER: K. Camp

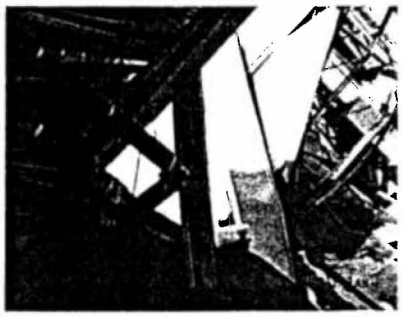
SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 021 DIRECTION:

SUBJECT: Potential asbestos covering on air handling unit on 2nd floor of Paper Machining area. Sample collected from this unit for asbestos sampling at 11:06 a.m. **Lab analysis of sample – total asbestos = ND**

PHOTOGRAPHER: K. Camp



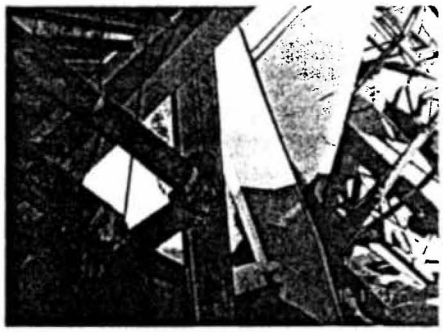
SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 022 DIRECTION:

SUBJECT: Potential asbestos piping observed on piping in collapsed portion of the facility.

PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 023 DIRECTION:

SUBJECT: Close up of knuck of piping in paritally collapsed portion. Sample PD-06 collected from this pipe located in the Printing Department at 11:15 am. **Lab analysis – total asbestos = 54.7%**

PHOTOGRAPHER: K. Camp

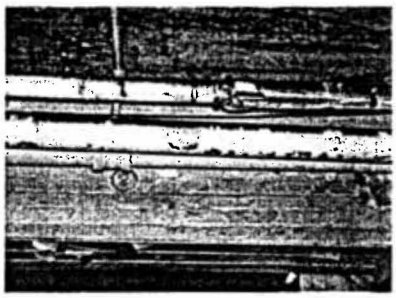
SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 024 DIRECTION:

SUBJECT: Potential asbestos pipe wrap debris located on floor in paritally collapsed portion of the Printing Department. Sample PD-07 collected from this debris at 11:20 am. **Lab analysis – total asbestos = 10.8%**

PHOTOGRAPHER: K. Camp



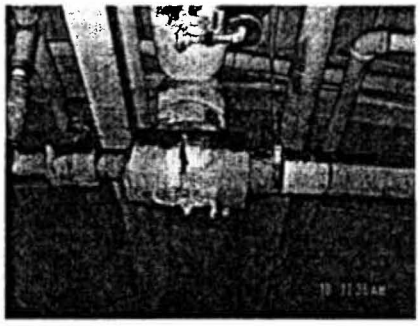
SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 028 DIRECTION:

SUBJECT: Potential asbestos piping observed in the Glue Department. Sample GD-09 collected from this pipe wrap at 11:35 am. Sampling location marked with marking paint. **Total asbestos = 8.2%**

PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 029 DIRECTION:

SUBJECT: Potential asbestos piping observed in Glue Department. Sample GD-10 collected from the knuckle of this pipe wrap at 11:40 am. **Total asbestos = 15%**

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 030 DIRECTION:

SUBJECT: Sample GD-10 marked on flooring beneath knuckle of the pipe wrap noted in earlier photo.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 031 DIRECTION: SUBJECT: Potential asbestos covering on a piece of equipment located on the 3rd floor of the Boiler House.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 032 DIRECTION: SUBJECT: Close up of Boiler House equipment. Note potential asbestos covering has began sloughing off.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 033 DIRECTION: SUBJECT: Different view of material sloughing off of equipment located on the 3rd floor of the Boiler House.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 034 DIRECTION: SUBJECT: Same piece of equipment in Boiler House... length-wise view.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 035 DIRECTION: SUBJECT: Potential asbestos material falling off machinery on 3rd floor of Boiler House.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

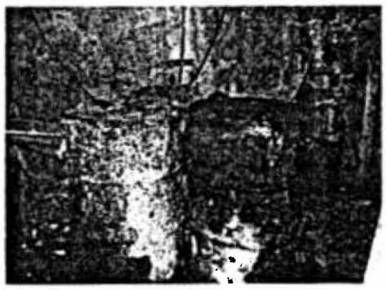
PHOTO NO: 036 DIRECTION: SUBJECT: Another view of photo 35 shown above.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 037 DIRECTION: SUBJECT: Potential asbestos covering on machinery present on the fourth floor of the Boiler House.

PHOTOGRAPHER: K. Camp



SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 038 DIRECTION: SUBJECT: Two waste oil drums located in Beater Room. Waste oil in drums will be pumped out and disposed by NYS DEC in mid-March, 2004

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 039 DIRECTION: SUBJECT: One of four concrete vats containing liquids that are semi-frozen.

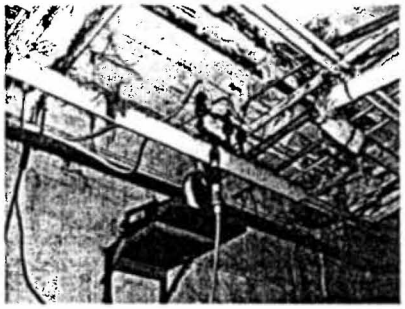
PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 040 DIRECTION:

PHOTOGRAPHER: K. Camp

SUBJECT: One of four concrete vats located in the Coating Compounds Bulk Storage Room. Liquid is present in the concrete vats.

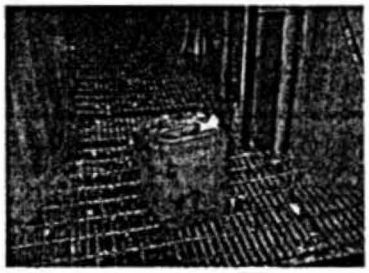


SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 041 DIRECTION:

PHOTOGRAPHER: K. Camp

SUBJECT: Machinery present above concrete dip tanks. Possibly used to drip corrosives or bases into vats.



SITE: Fort Orange Paper Co. DATE: February 17, 2004

PHOTO NO: 042 DIRECTION:

PHOTOGRAPHER: K. Camp

SUBJECT: Plastic carboy container possibly containing corrosives located in area near concrete vats in Coating Compounds Bulk Storage Room.

SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 043 DIRECTION:

SUBJECT: Frozen liquid observed in first sump located adjacent to Hydropulper Room.

PHOTOGRAPHER: K. Camp

SITE: Fort Orange Paper Co.

DATE: February 17, 2004

PHOTO NO: 044 DIRECTION:

SUBJECT: Frozen liquid observed in 2nd sump located in room adjacent to Hydropulper Room.

PHOTOGRAPHER: K. Camp

ATTACHMENT C

Removal Site Evaluation

Subject: Removal Site Evaluation for the Fort Orange Paper Site, Castleton-on-Hudson, Rensselaer County, New York

From: Kimberly Camp, On-Scene Coordinator
Response and Prevention Branch, Region II

To: File

Site ID No.: UT
Removal Assessment Ranking: 7

I. INTRODUCTION

On December 2, 2003, the U.S. Environmental Protection Agency (EPA) received a request from the New York State Department of Environmental Conservation (NYSDEC), Division of Hazardous Waste Remediation to evaluate the Fort Orange Paper Site (Site) as a removal action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 U.S.C. Sections 9601-9675.

The Fort Orange Paper Co. is considered a facility as defined by Section 101(9) of CERCLA, 42 U.S.C. Section 9601(9), and a release of a CERCLA hazardous substance has occurred. There is currently a completed exposure pathway to the hazardous substances for people trespassing on the property.

There has been a release of friable asbestos at the Fort Orange Paper Site. Asbestos-containing material (ACM) is scattered throughout the interior and exterior of multiple facility structures which comprise the Site. The potential exists for asbestos fibers to become airborne due to the amount present, the poor condition of much of the material, and its exposure to the elements. This could impact persons in the vicinity of the Site, either on the adjoining residential properties or trespassers onto the Site.

Several containers of hazardous substances at this facility including sodium hydroxide, paint thinners and cleaning solvents, paints, perchloroethylene (PCE), phosphoric acid, potassium hydroxide, ferric chloride and ammonium chloride, in various drummed quantities are present throughout the facility, and a small uncontained mercury spill is present on the second floor of the boiler house. All of the containers are located within the buildings, however, based upon the history of vandalism at the Site and the lack of security, the potential exists for the chemicals to migrate into the environment if spilled.

Due to the potential exposure to asbestos and the drummed hazardous materials, the Site poses a health threat to unprotected individuals accessing the property and to individuals residing or working in the vicinity. Based on the available information, a CERCLA removal action is warranted to contain the release of asbestos from the facility and prevent the migration of hazardous substances into the environment.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Physical location

The Site is located at 1900 River Road (a.k.a. Route 9J) in Castleton-on-Hudson, Rensselaer County, New York (see Figure 1). The Site covers approximately 120 acres and includes eight separate buildings. These structures are constructed of brick and wood building materials, the oldest building being approximately 146 years old. Former operations within these structures included a paper machine area, printing department, an electrical shop, maintenance shop, stripping department, glue department, oil shed, lube shop, polymer blending laboratory, auto shop, locomotive garage and boiler house. Figure 2 provides a layout of the entire facility in greater detail at the time of inspection. A complete set of photographs taken during the site inspection are provided as Attachment 1 of this document. In addition, facility operations also included the utilization of a 125-foot by 200-foot wastewater treatment lagoon. The lagoon is located along the northern perimeter of the Site and is shown in operation on the May 1995 aerial photograph included as Figure 3. The Site is bordered in all directions by residential properties. The closest residential dwelling is a nursing home which is located less than one-tenth of a mile to the southwest of the Site.

The area around the Site is generally rural. An estimated 1,283 residents from the Village of Castleton-on-Hudson live within a one mile radius of the Site. Potable water is supplied to the Village of Castleton-on-Hudson via municipal water supply. The municipal well field is located approximately twelve miles upgradient to the Site.

The Moordener Kill flows through the Site. The majority of the facility buildings and operations were located south of this waterway. The Moordener Kill drains directly into the Hudson River which is located approximately one-half mile west of the Site. surface water runoff from the facility discharged directly into the Moordener Kill. The Moordener Kill is a Class C (TS) waterway in the area of the Site. According to the Fort Orange Paper Co. Best Management Practices (BMP) document submitted to the NYSDEC May 25, 2001, facility floor drains and sumps, including sanitary wastes, are treated in an on-site wastewater treatment plant before being discharged into the Moordener Kill. The on-site wastewater treatment consists of a primary clarifier that discharges into one of two aerated lagoons that were constructed to buffer and equalize any releases from the facility prior to discharging into the Moordener Kill. It does appear that some of the sumps located in the process areas discharged directly into the aerated lagoon.

At this time, no site-specific information is available regarding the ground water beneath the property. Due to the proximity of the Hudson River and the Moordener Kill, perched groundwater is anticipated to be relatively shallow, less than ten feet below grade.

Based upon information contained in the Best Management Practices (BMP) documents dated May 25, 2001 and October 1992, it appears that Fort Orange Paper Co. had disposed of non-putrescible wastes (strapping, string, broken wooden pallets, etc.) and coal ash solids generated in the boiler house in an on-site landfill. The office and putrescible wastes were hauled off-site and disposed of in a local landfill.

2. Site characteristics

The Fort Orange Paper Site is the location of a former paper manufacturer which operated from 1858 until the plant closed in February 2002. An investigation into the nature of facility operations during this 144-year period is currently underway. The most recent operations involved the manufacture of clay-coated folding box board out of recycled paper for use in cereal boxes and other consumer packaging. A portion of the finished products produced involved the use of lithograph dyes. According to local press reports, the facility had a daily output of 140 tons per day (tpd) of paperboard derived from waste paper.

Power to the facility was cut off due to non-payment of bills causing a cessation of operations at the Site on February 28, 2002. The State is currently conducting a criminal investigation of Recycled Properties, LLC, the listed property owner, of which John P. Hayes is the President.

Since February 2002, extensive salvage operations have occurred at this facility. Reportedly, a NYC salvage company began overseeing the auction of various pieces of equipment associated with this facility. It appears that in the process of the subsequent salvaging operations, asbestos-containing materials were damaged and/or disbursed throughout the buildings and main plant area grounds.

3. Site assessment activities/observations

The following EPA personnel were directly involved in the Removal Site Evaluation conducted at the Fort Orange Paper: Kimberly Camp (732-452-6415) and Andrew L. Confortini (732-906-6827) of the Emergency and Remedial Response Division.

On December 2, 2003, the On-Scene Coordinator's (OSC's) conducted an initial reconnaissance of the Site. On February 18, 2004, the Removal Support Team (RST) conducted an entry into the accessible structures to collect samples for asbestos analysis and to conduct an inventory of the hazardous substances remaining at the facility. Due to a recent snowfall, an inspection of the grounds was not possible. Ten pipe/tank insulation samples were collected from both outdoor areas and within the buildings. All samples were sent to EMSL Analytical, Inc. for polarized light microscopy (PLM) bulk asbestos analysis and transmission electron microscopy (TEM). The samples were collected from areas of pipe insulation where appreciable amounts of suspect-asbestos material were evident; fallen from insulated surfaces or dispersed on the floor.

During the inventory of the remaining hazardous materials on site, two laboratories were observed on the facility. Both laboratories contain various lab reagent chemicals that may pose a threat to human health or the environment if they were spilled, opened, or damaged by vandals. In addition to the chemical reagents noted in the laboratories, hazardous materials were also noted in the Parts Storage area, Offices, Printing Shop, Woodworking/Maintenance Shop, and the Water Treatment area. These hazardous materials consisted of sodium hydroxide, perchlorethylene, ferric chloride, phosphoric acid, potassium hydroxide and ammonium chloride.

On April 8, 2004, the OSC's and EPA management conducted a site visit to determine the risks associated with the Site. During this site visit, it was noted that the New York State Department pf Environmental Conservation (NYSDEC) had not removed 20 55-gallon waste oil drums and approximately 40 5-gallon buckets containing grease and lube oils. These drums still remain on site and several were noted to be in poor condition or leaking. In addition to the waste oil drums, several plastic spill pallets containing oily water were scattered throughout the Site. Spillage was observed in several areas of the facility around the remaining waste oil drums and spill pallets.

Asbestos lined piping was observed on the exterior of the boiler house and throughout the courtyard surrounded by the boiler house and the main processing building. Exposure to the elements and lack of maintenance has caused large portions of the asbestos coating on the pipes to deteriorate and fall off.

4. Release or threatened release into the environment of a hazardous substance, or pollutant, or contaminant

The results obtained from the ten insulation material samples collected on February 18, 2004 during the EPA/RST site inspection indicate the presence of asbestos in nine of those samples. In terms of percentages, the sample results identified asbestos which ranged from 5.4 to 59.4%. A copy of all analytical results are provided as Attachment 2. Sample locations are illustrated on Figure 2. In each case, the fiber types were identified as either chrysotile or amosite. Sample FOP-PD-06 (54.7% chrysotile) was collected from pipe insulation located within the collapsed portion of the printing department. Due to the roof collapse, this material is exposed to the environment. The other outdoor sample, FOP-CY-02, was found to contain 7.4% chrysotile. In either case, a portion of this insulation material has already weathered to the point where it has fallen off the piping it was originally attached to.

The remaining eight samples were collected from various areas within the site structures. Due to many factors, including the lack of heat in the facility, the doors being left open, vandals or weather breaking the majority of the building windows, and salvage activities, much of the ACM indoors has become weathered or damaged. In many cases, the ACM have fallen off piping and can be found on the building floors. This material has become extremely friable due to exposure

to the elements. High winds, common at the Site, can easily cause asbestos fibers to be separated from their source and become airborne. Due to the local topography and the relative arrangement of facility structures on the Site, the channeling effect of wind and air currents between these building may increase the dispersion of asbestos fibers.

When asbestos is friable, it is designated as a CERCLA hazardous substance under 40 CFR Table 302.4. Friability is the ease with which a material can be crumbled, pulverized or reduced to powder when dry, by hand pressure. The more friable the material, the greater the potential for fiber release and contamination. It is reported that, once released, asbestos fibers have the ability to remain entrained in the air for extensive periods.

Currently, the potential exists for ongoing releases of friable asbestos to occur at the Site. The asbestos-containing material is scattered throughout the interior of the buildings.

The manner in which the remaining structures are open to the elements (e.g., broken walls, roofs and windows) provides a route for the air currents to influence the condition and migration of the asbestos-containing material within the buildings. Rain can, over time, further erode the asbestos-containing material presently outside of the buildings and result in runoff carrying fibers into the soil and migrating off-site. Followed by dry conditions, the fibers could then become airborne from the soil.

An asbestos release from the materials present at the Site could impact unprotected persons on-site through direct inhalation exposure. The potential exists for asbestos fibers to become airborne due to the amount present, the poor condition of much of the material, and its exposure to the elements. This could impact persons in the vicinity of the Site, especially within the residential areas.

The following hazardous substances have also been identified in various containers located throughout the Site:

Substances Identified	**Statutory Source for Designation as a Hazardous Substance**
Ammonium chloride	CWA § 311(b)(4)
Ferric chloride	CWA § 311(b)(4)
Perchloroethylene	CWA § 307(a), Resource Conservation and Recovery Act (RCRA) § 3001
Phosphoric acid	CWA § 311(b)(4)
Potassium hydroxide	CWA § 311(b)(4)
Sodium hydroxide	CWA § 311(b)(4)
Mercury	CWA § 307(a); CAA § 112; RCRA § 3001

In the statutory sources cited above, CWA § 311(b)(4) indicates that the source is Section 311(b)(4) of the Clean Water Act, CWA § 307(a) indicates that the source is Section 307(a) of the Clean Water Act, CAA § 307(a), and RCRA § 3001 indicates that the source is Section 3001 of the RCRA.

These hazardous substances are acutely and chronically toxic, corrosive, reactive and/or flammable. The potential health effects from these compounds are identified below:

Potential Health and Toxicological Effects

Chemical	Irritant	Kidney/ Liver Damage	Dermal/ Eye Effects	Blood/ Cardio Damage	Respiratory Effects	CNS Damage
Ammonium chloride					x	x
Ferric chloride	x	x	x		x	
Perchloroethylene	x	x	x		x	x
Phosphoric acid	x		x		x	
Potassium hydroxide	x		x		x	
Sodium hydroxide	x		x		x	
Mercury	x		x		x	x

The environmental effects posed by these materials include potential airborne release and the potential for migration of contamination into the surface water and ground water if released from their containers. Numerous events could trigger releases, but the chief concerns are fire and trespassers.

Currently, the potential exists for a release of the drummed hazardous materials to occur at the Site. The manner in which the remaining structures are open to the elements (e.g., broken walls, roofs and windows) and the potential for additional portions of the structure to collapse may result in the corrosion of the containers and subsequent release of hazardous materials.

A release from the drummed containers present at the Site could impact unprotected persons on-site through direct contact or inhalation exposure. The potential exists for trespassers to come into contact with the hazardous materials during salvage operations, which could impact persons in the vicinity of the Site, especially within the residential areas.

5. National Priorities List (NPL) status

The Fort Orange Paper Site is not an NPL Site. Currently, a Hazard Ranking System package is not being prepared.

B. Other Actions to Date

1. Previous actions

There have been no Federal CERCLA actions taken at the Site. Immediately prior and concurrent to EPA activities, the NYSDEC had removed a variety of hazardous materials from the Site. The scope of NYSDEC work involved contacting the manufacturers of materials found on-site to determine if they would remove their products from the Site. As a result, NYSDEC arranged for approximately 8,000 gallons of hazardous materials in various size containers to be removed from the premises. In addition, the NYSDEC contracted a waste oil recycler to remove the 75 55-gallon drums containing waste oil. The removal was 80% completed when persistent freezing weather conditions forced the operations to cease until more favorable weather was present. Approximately 50 containers (ranging from 5-gallon pails to 55-gallon drums) containing waste oils, lube oils, and grease remain at the site and will not be removed by the NYSDEC.

2. Current actions

Currently, no actions are being taken at the Site.

C. State and Local Authorities' Role

1. State and local actions to date

The NYSDEC has requested that EPA evaluate the Site for CERCLA removal action consideration with regards to the asbestos contamination and those hazardous materials which they could not remove from the property.

2. Potential for continued State/local response

When the weather permits, NYSDEC will continue operations to remove the remaining drums of waste oil from the Site. After the waste oil has been removed, no further action is anticipated by the NYSDEC.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to the Public Health or Welfare

There is a potential exposure to nearby human populations, animals or the food chain from hazardous substances, or pollutants, or contaminants [40 CFR §300.415(b)(2)(i)]. The primary potential routes of exposure to asbestos at the Site are inhalation and ingestion, while the primary potential routes of exposure to the drummed hazardous materials are direct contact and inhalation. Individuals that access the Site may be exposed to the asbestos, the spilled mercury, and the drummed hazardous materials that are in the buildings or rubble piles. Individuals coming into contact with both the asbestos and hazardous materials may transport the materials off-site on their clothing and/or shoes, thus potentially impacting others.

High levels of hazardous substances, or pollutants, or contaminants may exist in soils largely at or near the surface, that may migrate [40 CFR §300.415(b)(2)(iv)]. Analytical testing has revealed the presence of friable asbestos throughout the Site. This material is present in the form of pipe insulation, mudded joints, duct insulation, and boiler insulation. Much of the asbestos is reported to be moderately to severely damaged, more than 10% exposed, accessible, friable and generally ranging from fairly easy to damage to fluffy, flaky and hanging.

Weather conditions exist that may cause hazardous substances, or pollutants, or contaminants to migrate or be released [40 CFR §300.415(b)(2)(v]. Asbestos may migrate off-site by wind carrying airborne asbestos. The NYSDEC has indicated that high winds are common at the Site due to proximity to the Hudson River and site elevation. Channeling of winds between the buildings was noted by the OSC during a site visit on February 18, 2004. The drummed hazardous materials present at the Site exist in various sized drums that are beginning to rust and corrode due to exposure to the elements.

Rain events may transport asbestos off-site as it drains off the Site; this asbestos can become airborne during dry conditions subsequent to a rain event. Rain events may potentially contribute to the erosion of the drummed containers, causing the drums to leak their contents; the hazardous materials may then be transported offsite as the rain water drains off the Site. This could impact persons in the vicinity of the Site.

There is no other appropriate federal or state response mechanisms available to respond to the situation at the Site [40 CFR §300.415(b)(2)(vii)]. The NYSDEC has requested that EPA abate the threats to public safety and the environment at the Site, with regards to both asbestos and the drummed hazardous materials. Asbestos is a general term used to describe minerals that tend to form fibers when they are broken. These minerals are formed under conditions of very high heat and pressure deep in within the earth, and they are resistant to the types of temperatures and pressures found in our environment at the surface. Because their chemical composition is unchangeable, an asbestos mineral will always break into fibers. Large fibers have the potential

to break into smaller ones, which eventually results in its reduction to microscopic size. Because of their small size, shape and lightness, these fibers act are more like a gas than a dust.

Chrysotile is a mineral containing long, flexible fibers that, due to their electron structure, tend to stick to things. This places them in a very good position to become re-entrained. Amosite is a mineral whose fibers are finely divided, harsh and brittle. These are also easily re-entrained.

The most significant human exposure pathway for asbestos is the inhalation of respirable asbestos fibers. The ingestion of fibers may also be an exposure pathway of concern for workers or children who may come into contact with site materials. In addition to environmental exposures, the improper handling of work clothing from on-site workers may also pose a danger. Workers can carry the fibers home in their clothing and hair, and expose other family members.

Asbestos exposure may cause two primary classes of health effects. The first is asbestosis, a non-malignant disease characterized by a progressive scarring of the lung and pleura. This condition progresses slowly over many decades, and may continue even after the asbestos exposure has ceased. As microscopic scarring builds up, the lungs become stiff and restricted with thickening in the walls of the breathing spaces. The stiffening of the lungs, when severe, can make it difficult to breathe. The other major class of asbestos-related health effects is mesothelioma and lung cancer after apparently trivial exposure to asbestos.

All asbestos-related malignancies have a latency period. There is a considerable time interval between asbestos exposure and when lung cancer, mesothelioma, or the other asbestos-related cancers are seen. This latency period may vary from 20 to 40 years, although some cases may occur earlier.

The current Occupational Safety and Health Administration standard for asbestos in the workplace is 0.2 fibers per cubic centimeter of air as an eight-hour time-weighted average. According to the National Institute for Occupational Health and Safety, evaluation of all available human data provides no evidence for a threshold or for a "safe" level of asbestos exposure.

The most significant human exposure pathway for the remaining hazardous materials at the Site is inhalation. Based upon the evidence of salvaging operations at the site, the potential exists for trespassers to release the contents of the drums to the environment or to come into contact with the spilled mercury. Exposure to the released materials can cause significant health threats, as noted in the chart above.

B. Threats to the Environment

Based on the available information, there is a limited potential threat to the environment from the asbestos, although it should be noted that an exposure scenario does exist for the wildlife that use

the area. Entry of asbestos fibers to surface water is possible through Moordener Kill, which flows through the Site.

A potential threat to the environment exists from the drummed hazardous materials present throughout the Site. If the materials in the drums were released during salvaging operations or if a building were to collapse, then the potential exists for the groundwater beneath the Site to be impacted. The potential also exists for surface runoff to flow into the Moordener Kill, a designated trout spawning stream.

IV. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed action to address the exposed asbestos containing material will result in an increased potential for exposure to asbestos fibers that may become airborne due to the disturbance by the elements, wildlife, and trespassers. Two additional buildings have collapsed due to the weight of snow this past Winter, and the possibility exists for further collapse and decay of the remaining buildings, thereby releasing asbestos fibers into the environment.

Based upon the corroded condition of several drums remaining at the facility and the lack of proper security at the Site, a delayed action to address the remaining drummed hazardous materials will result in an increased potential for exposure to both human health and the environment.

V. CONCLUSIONS

Based on the available information, a release of CERCLA Hazardous Substances, in the form of friable asbestos, has occurred at the Site. Based on the quantity and condition of the asbestos-containing material present at the Site, and the manner in which the materials are exposed to the elements, the Site poses a health threat to unprotected individuals accessing the Site and being exposed to asbestos and a potential health threat to individuals residing or working in the vicinity of the Site.

A potential release of CERCLA Hazardous Substances from the containerized hazardous materials exists at the Site. Based upon the condition of the containers, the manner in which the materials are exposed to the elements, and the potential for future salvaging operations to occur, the Site poses a health threat to unprotected individuals accessing the Site and being exposed to the hazardous materials.

Attachments:
Attachment 1: Digital Photographs
Attachment 2: Asbestos Analytical Results Package
Attachment 3: EPA, RSE Criteria Form
Attachment 4: Request for Time Critical Removal Action
Attachment 5: Access Agreement

ATTACHMENT D

Analytical Results Package

Weston Solutions, Inc.
Federal Programs Division
Suite 201
1090 King Georges Post Road
Edison, New Jersey 08837-3703
732-225-6116 • Fax 732-225-7037
www.westonsolutions.com

REMOVAL SUPPORT TEAM
EPA CONTRACT 68-W-00-113

RST-02-F-01406

TRANSMITTAL MEMO

To: Kimberly Camp
Response and Prevention Branch, U.S. EPA Region II

From: Jennifer Sy, Data Reviewer
RST Region II

Subject: Fort Orange Paper Company Site, Castleton on the Hudson, NY

Date: March 15, 2004

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameter:

  Asbestos PLM and TEM

- Matrices and Number of Samples:

  Bulk 10 samples

- Sampling date: February 18, 2004

The final data assessment narrative and original analytical data package are attached.

cc:		
	RST PM	M. Garibaldi
	RST SITE FILE TDD #	02-0401-0001
	ANALYTICAL TDD#	02-0402-0011
	PCS#	4365

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: ssiegel@EMSL.com

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Fax: (732) 225-7037 Phone: (732) 225-6116210
Project: RFP#4365

Customer ID: RFWE53
Customer PO: 0042813
Received: 02/20/04 1:23 PM

EMSL Order: 040402916
EMSL Proj: EPA Contract 68-W-00-113
Analysis Date 2/26/2004

Asbestos Analysis of Non-Friable Organically Bound Materials by PLM via the NY State ELAP 198.1 Method

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES		% TOTA ASBEST
FOP-BH-01		Beige	94.1	None	5.4	Amosite	
040402916-0001		Non-Fibrous			<1	Chrysotile	
		Homogeneous					
FOP-CY-02		White	92.6	None	7.1	Amosite	
040402916-0002		Non-Fibrous			<1	Chrysotile	
		Homogeneous					
FOP-HP-03		White	90.0	None	10.0	Chrysotile	1(
040402916-0003		Non-Fibrous					
		Homogeneous					
FOP-MS-04		Beige	40.7	None	59.3	Chrysotile	5(
040402916-0004		Non-Fibrous					
		Homogeneous					
FOP-PM-05		Brown	100.0	None		No Asbestos Detected	
040402916-0005		Non-Fibrous					
		Homogeneous					
FOP-PD-06		Gray	45.3	None	54.7	Chrysotile	5(
040402916-0006		Non-Fibrous					
		Homogeneous					
FOP-PD-07		White	89.2	None	10.2	Amosite	1(
040402916-0007		Non-Fibrous			<1	Chrysotile	
		Homogeneous					
FOP-PS-08		Beige	74.7	None	25.3	Chrysotile	2(
040402916-0008		Non-Fibrous					
		Homogeneous					
FOP-GD-09		White	91.8	None	7.5	Amosite	
040402916-0009		Non-Fibrous			<1	Chrysotile	
		Homogeneous					

Analyst(s)
Delores Beard (10)

Stephen Siegel, CIH
or other approved signatory

Polarized Light Microscopy is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. The above test must not be used to claim product endorsement by NVLAP nor any agency of the United States Government. The test results contained within this report meet the requirements of NELAC unless otherwise noted.
ACCREDITATIONS: AIHA #100192, NVLAP #101048-0 and NY STATE ELAP #10872

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Customer PO: 0042813
Received: 02/20/04 1:23 PM

EMSL Order: 040402916
EMSL Proj: EPA Contract 68-W-00-113
Analysis Date 2/26/2004

Asbestos Analysis of Non-Friable Organically Bound Materials by PLM via the NY State ELAP 198.1 Method

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES		% TOTAL ASBESTOS
FOP-GD-10		White	85.0	None	13.4	Amosite	15.0
040402916-0010		Non-Fibrous Homogeneous			1.6	Chrysotile	

Analyst(s)
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Stephen Siegel, CIH
or other approved signatory

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Asbestos Analysis of Non-Friable Organically Bound materials by Transmission Electron Microscopy via NYS ELAP Method 198.4

SAMPLE ID	DESCRIPTION	APPEARANCE	% MATRIX MATERIAL	% NON-ASBESTOS FIBERS	ASBESTOS TYPES	% TOTA ASBEST
FOP-PM-05 *040402916-0011*		Brown Non-Fibrous Homogeneous	100.0	None	No Asbestos Detected	

Analyst(s)
Steve Siegel (1)

Stephen Siegel, CIH
or other approved signatory

NY\TNOB-2

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ATTACHMENT E

Remaining Waste Inventory

Fort Orange Paper Company Waste Inventory Minus Oil & Grease
DEC Walk Thru on 7/16/04

Area	Area Description	Waste Items
1	Boiler House - 2nd Floor	-Hg spill on floor top of stairs -small containers (1 gal or less) of water treatment and testing chemicals
8	Old Cafeteria (near Boiler House w/ OH Door)	2 - 4L glass amber bottles of unknown liquids 2 - 5g white pails with corrosives - Sodium Hydroxide in one 2 - 1g white jugs of parts cleaner 1 - 30g fiber drum of dyestuff 1 - 20g fiber drum of dyestuff 1 scot pak 4 - 5g metal pails of roof coating 3 - 5g square jugs of alkaline water treatment chemical
9a	Stockroom	miscellaneous aerosols 5 qts lithographic solution containing acid several containers <1 gal each of inks a few rechargeable batteries for two-way radios
9b	Stockroom	2 - 5g pails spindle oil 1 - 5g pail creosote 2 - 5g pails concrete sealer 3 qts solvent miscellaneous aerosols 14-20 gallons of paints - latex and oil base, a few qts, most gallon containers
10a	Engineering/Design Dept.	6 - 5g plastic containers of print developer/finisher solutions
10b	Engineering/Design Dept.	10 g of spent fixer or developer solution 2 - 5g pails of paper coating
11	Hallway and offices, including nurses office	multiple broken fluorescent lighting on ground and in fixtures
14	Electrical Maintenance Room	1g cleaning solution (moved to waste pile?) Miscellaneous paints in qts and gallons miscellaneous aerosols several lamps containing Hg, possibly switches 5g scale remover - corrosive 5g transformer oil dated 1988
15	Waste Pile	several containers 1 - 5g size of fountain solution several containers 1g or less plate cleaner full spill pallets other unidentified wastes
16	Auto Shop	5g paint
17	Storage Room near Lunch Room	5g paint and thinner
18	Laboratory	miscellaneous reagents, test kits, inks numerous unidentified small containers
20	Locomotive Shed	2 - 55g drums oil outside 1 - 55g drum oil inside several smaller oil containers
21	Used Oil Shed	1 - 55g leaking diesel fuel additive several 55g drums oil and grease 2 bags yellow pigment for safety paint

22	WWT Laboratory	miscellaneous reagents, test kits numerous unidentified small containers (Sodium Azide)
23	Wood shop	5 - 5g black metal containers of unknown material 2 - 5g pails waste oil
24	Blue Garage	Pile of light ballasts in shed behind blue garage