



MEMORANDUM

TO: Mohawk Tannery Site File

cc: Tom Condon, U.S. Environmental Protection Agency, On-Scene Coordinator

FROM: Aaron L. Benoit, Weston Solutions, Inc., Superfund Technical Assessment and Response Team III

DATE: 13 December 2007

RE: Emergency Response Activities at the Mohawk Tannery site.
TDD No. 01-07-10-0002; Task No. 0350; Document Control No. R-4983.

INTRODUCTION

On 6 October 2007 at approximately 1200 hours, Weston Solutions, Inc. (WESTON®), Superfund Technical Assessment and Response Team III (START) Project Leader Mark Hall was contacted by U.S. Environmental Protection Agency (EPA) On-Scene Coordinator (OSC) Tom Condon and informed of an emergency response (ER) to a fire at the Mohawk Tannery site (the site) located on Fairmount Street in Nashua, Hillsborough County, New Hampshire (NH) [see Attachment A – Site Location Map (Figure 1)]. OSC Condon requested that the START responder and two additional START members mobilize to the site to provide air sampling support for asbestos and to collect suspected asbestos-containing material (ACM) debris samples that were dispersed to a nearby residential area. START Responder Aaron Benoit was notified by START member Hall and mobilized directly to the site. START members Christine Dupree and Carolyn Imbres mobilized to the START office; then to the EPA Warehouse to retrieve additional air sampling and monitoring equipment as requested by EPA; and then mobilized to the site.

SITE LOCATION

The site is located in a mixed industrial/residential area at the end of Fairmount Street in Nashua, NH. The geographic coordinates of the site, as measured from its approximate center, are 42° 45' 55" north latitude and 71° 29' 08" west longitude. The site is bordered to the north by a wooded area, to the east and southeast by residences, and to the west and southwest by the Nashua River [see Attachment B – Site and Sample Location Diagram (Figure 2)].

SITE HISTORY

The former Mohawk Tannery facility (a.k.a. Granite State Leathers) is located on a 30-acre parcel in Nashua, NH. The facility produced tanned hides between 1924 and 1984 and is currently inactive.

The EPA began a removal action in September 2000 to remove and dispose of ACM from the old tannery building; to characterize and dispose of contamination contained in drums and tanks on site; and to remove empty drums, containers, and tanks and dispose of them at an off-site facility. This action was completed in January 2001. In an effort to further secure the site during the removal action, EPA repaired a number of gates and posted warning signs regarding the dangers of trespassing. These gates and fences have been maintained by the former property owner under a 2006 agreement between the property owner, EPA, and New Hampshire Department of Environmental Services (NH DES).

RESPONSE ACTIVITIES

At 1410 hours on 6 October 2007, START member Benoit arrived at the site and met with OSC Tom Condon, NH DES Emergency Responders, and a representative from the Nashua Fire Department. By that time the fire had been brought under control. START was informed that the fire had started at approximately 0500 hours and that winds had been out of the northwest. Smoke and debris from the fire were being blown to the southeast, and residents had reported that ash and debris were deposited in their yards. OSC Condon, START Site Leader (SL) Benoit, and NH DES discussed plans for START to conduct perimeter air sampling for asbestos and ACM debris sampling. EPA OSC Condon requested that START procure a laboratory for the analysis of five asbestos air samples and up to 15 ACM debris samples.

At 1440 hours, OSC Condon and START SL Benoit inspected the fire-damaged portions of the site and the remaining portion of the building. START photodocumented the interior of the building (see Attachment C – Photodocumentation Log).

At 1450 hours, START members Dupree and Imbres arrived at the site and calibrated four low-flow air sampling pumps equipped with 0.8-micrometer (μm) methylcellulose ester (MCE) cartridges for perimeter asbestos air sample collection. START SL Benoit contacted START chemist John Burton to procure a laboratory for the analysis of the samples.

At 1524 hours EPA, START, and NH DES conducted a site walkthrough of the residential areas to the southeast and east of the site to locate potential perimeter air sampling stations and debris for sampling based on reports from local residents.

At 1606 hours, START deployed a low-flow pump equipped with a 0.8- μm MCE cartridge for asbestos analysis at Air Station A, located downwind of the site, approximately 100 feet from the corners of North Intervale, Intervale, and Bitimas Streets.

At 1622 hours, START deployed a low-flow pump equipped with a 0.8- μm MCE cartridge for asbestos analysis at Air Station B, located downwind of the site, between residential homes at 40 and 42 Fairmount Street.

At 1626 hours, START deployed a low-flow pump equipped with a 0.8- μm MCE cartridge for

asbestos analysis at Air Station C, located downwind of the site on the perimeter chain-link fence surrounding the site.

At 1640 hours, START deployed a low-flow pump equipped with a 0.8- μ m MCE cartridge for asbestos analysis at Air Station D, located upwind of the site at the end of Chautauqua Avenue.

At 1643 hours, START returned to the support zone. OSC Condon, START, and NH DES discussed conducting debris sampling at residential properties located at 64 and 40 Fairmount Street, 6 Hughey Street, and 17 North Intervale Street. START would collect additional debris samples at locations selected by OSC Condon.

At 1710 hours, START began collecting ACM debris samples for asbestos analysis (see Attachment D – Asbestos-Containing Material and Air Samples START Sample Locations for the Mohawk Tannery Emergency Response).

At 1805 hours, the City of Nashua Fire Department responded to a flare up at the site. The fire was extinguished and the Fire Department departed the site.

At 1835 hours, debris sample collection was completed. START collected 12 ACM samples (ACM-01 through ACM-12).

At 1936 hours, START retrieved low-flow air sampling pumps equipped with a 0.8- μ m MCE cartridges from Air Station Locations A through D. START chemist Burton contacted START SL Benoit regarding a laboratory for the analysis of the samples. Samples would be delivered by START to EMSL Analytical, Inc., located in Woburn, Massachusetts. EMSL would be prepared to accept the samples on Monday morning, 8 October 2007, and would provide results by 1200 hours.

At 2005 hours, START returned to the support zone and generated chain-of-custody documentation for air and debris samples (see Attachment E – Chain-of-Custody Record).

At 2100 hours, the response was terminated by OSC Condon. START demobilized from the response.

On 8 October 2007 at 0830 hours, ACM samples ACM-01 through ACM-12, and air samples Station A through Station D were delivered to EMSL Analytical, Inc., for analysis [see Attachment F – Asbestos Air Cartridge Analyses (Table 1) and Attachment G – Bulk Asbestos Analyses by PLM (Table 2)].

SUMMARY OF ANALYTICAL RESULTS

Air sample results indicated the presence of total fibers at Air Station A of 0.003 fibers per cubic centimeter (fibers/cc). Air Station B through Air Station D indicated <0.003 fibers/cc.

All asbestos results were non-detect (ND) for debris samples ACM-01 through ACM-12.

Attachment A

Site Location Map (Figure 1)

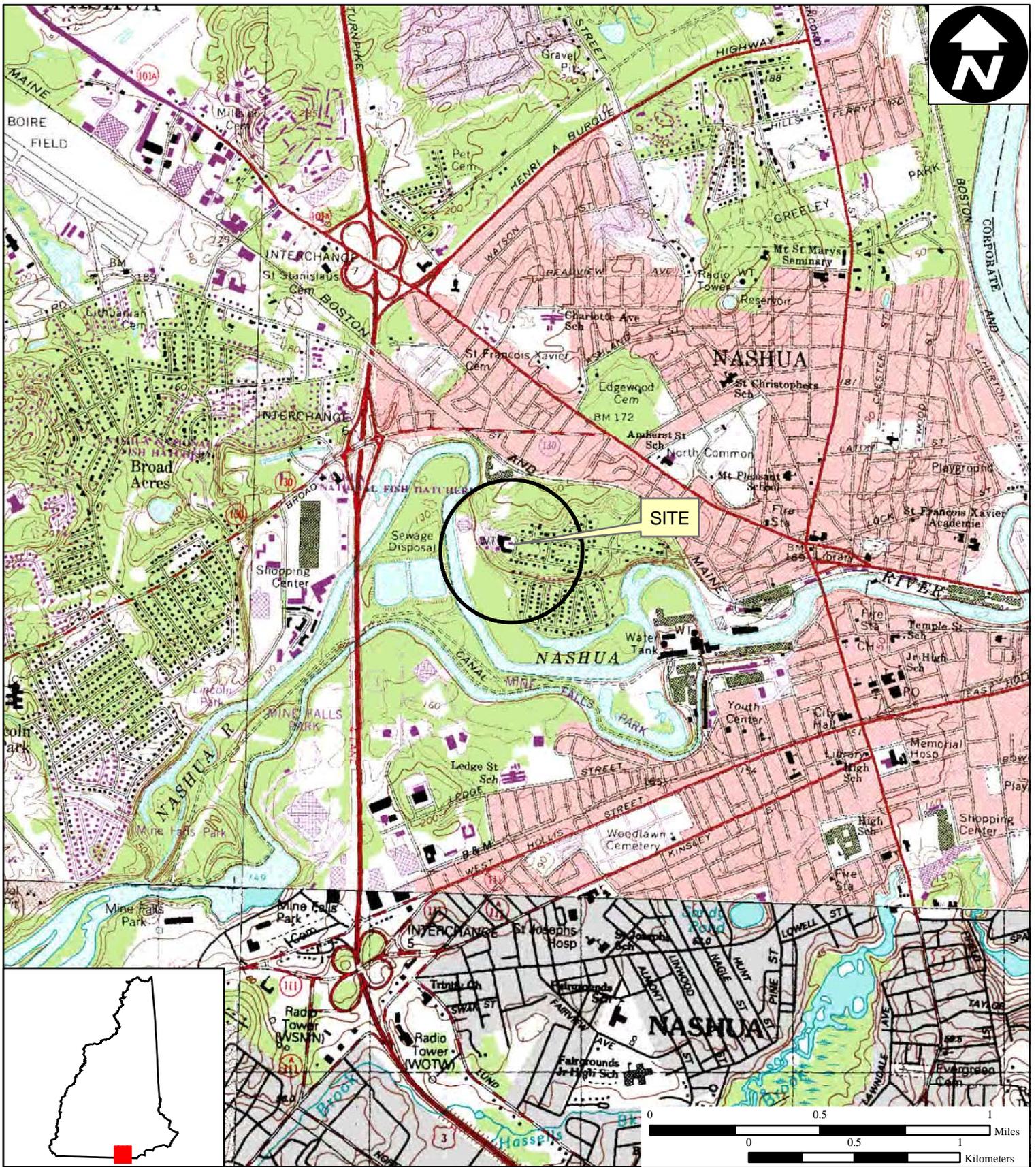


Figure 1

Site Location Map

**Mohawk Tannery ER
Fairmount Street
Nashua, New Hampshire**

**EPA Region I
Superfund Technical Assessment and
Response Team (START) III
Contract No. EP-W-05-042**

TDD Number: 07-10-0002
Created by: Aaron Benoit
Created on: 8 October 2007
Modified by: Christine Dupree
Modified on: 25 October 2007

Data Sources:
 Topos: MicroTop/USGS
 Quadrangle Name(s): Nashua North 1981, Nashua
 South 1980, Pepperell 1980, South Merrimack 1985

All other data: START



Attachment B

Site and Sample Location Diagram (Figure 2)



Figure 2
Site and Sample
Location Diagram
Mohawk Tannery ER
Fairmount Street
Nashua, New Hampshire

EPA Region I
 Superfund Technical Assessment and
 Response Team (START) III
 Contract No. EP-W-05-042
 TDD Number: 07-10-0003
 Created by: Aaron Benoit
 Created on: 8 October 2007
 Modified by: Aaron Benoit
 Modified on: 10 October 2007

LEGEND

-  Debris Sample
-  Air Sample Station



0 2550 100 150 200 250 300 350 400 450
 Feet

Data Sources:
 Imagery: City of Nashua Digital
 Ortho Quad NE Quarter;
 Landview 6/MARPLOT
 Topos: MicroPath
 All other data: START



Attachment C

Photodocumentation Log

PHOTOGRAPHY LOG SHEET
Mohawk Tannery • Nashua, New Hampshire



SCENE: View of the fire-damaged southwest portion of the site building. Photograph taken facing southeast.

DATE: 6 October 2007

TIME: 1441 hours

PHOTOGRAPHER: Aaron Benoit

CAMERA: Nikon CoolPix 3100



SCENE: View of the roof from which suspected asbestos-containing material was dispersed during the fire.

DATE: 6 October 2007

TIME: 1441 hours

PHOTOGRAPHER: Aaron Benoit

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Mohawk Tannery • Nashua, New Hampshire



SCENE: View of the building remnants. Photograph taken facing southwest.

DATE: 6 October 2007

TIME: 1443 hours

PHOTOGRAPHER: Aaron Benoit

CAMERA: Nikon CoolPix 3100



SCENE: View of the entrance of the site and air sampling Station C. A typical air sampling station set up. Photograph taken facing west.

DATE: 6 October 2007

TIME: 1625 hours

PHOTOGRAPHER: Aaron Benoit

CAMERA: Nikon CoolPix 3100

PHOTOGRAPHY LOG SHEET
Mohawk Tannery • Nashua, New Hampshire



SCENE: View of suspected asbestos-containing material in a garden at a neighboring residence that was dispersed during the fire.

DATE: 6 October 2007

TIME: 1721 hours

PHOTOGRAPHER: Aaron Benoit

CAMERA: Nikon CoolPix 3100



SCENE: View of suspected asbestos-containing material at a neighboring residence that was dispersed during the fire. Photograph taken facing northwest.

DATE: 6 October 2007

TIME: 1729 hours

PHOTOGRAPHER: Aaron Benoit

CAMERA: Nikon CoolPix 3100

Attachment D

Asbestos-Containing Material and Air Samples START Sample Locations for the Mohawk Tannery Emergency Response.

**Asbestos-Containing Material and Air Samples
START Sample Locations for the
Mohawk Tannery Emergency Response**

Sample Location No.	Scribe No.	Date/ Time (Hours)	Remarks	Sample Location	Sample Description
MATRIX: Bulk					
ACM-01	01ZZ-0001	10/6/07 1712	Grab	64 Fairmount Street	Suspect Asbestos-containing material (ACM) sample collected from a property east of the Mohawk Tannery Emergency Response (Mohawk Tannery ER).
ACM-02	01ZZ-0002	10/6/07 1720	Grab	40 Fairmount Street	Suspect ACM sample collected from a property east of the Mohawk Tannery ER.
ACM-03	01ZZ-0003	10/6/07 1722	Grab	Rear of 40 Fairmount Street	Suspect ACM sample collected from a property east of the Mohawk Tannery ER.
ACM-04	01Z -0004	10/6/07 1731	Grab	6 Hughey Street	Suspect ACM sample collected from a property east-southeast of the Mohawk Tannery ER.
ACM-05	01ZZ-0005	10/6/07 1740	Grab	17 North Intervale Street	Suspect ACM sample collected from a property southeast of the Mohawk Tannery ER.
ACM-06	01ZZ-0006	10/6/07 1801	Grab	North Intervale Street and Bitimas Street	Suspect ACM sample collected from a property southeast of the Mohawk Tannery ER.
ACM-07	01ZZ-0007	10/6/07 1807	Grab	5 Bitimas Street	Suspect ACM sample collected from a property south-southeast of the Mohawk Tannery ER.
ACM-08	01ZZ-0008	10/6/07 1813	Grab	North Intervale Street and Fairmount Street	Suspect ACM sample collected from a property east of the Mohawk Tannery ER.
ACM-09	01ZZ-0009	10/6/07 1818	Grab	5 Hutchinson Street	Suspect ACM sample collected from a property east-southeast of the Mohawk Tannery ER.
ACM-10	01ZZ-0010	10/6/07 1822	Grab	Hutchinson Street and Hughey Street	Suspect ACM sample collected from a property east-southeast of the Mohawk Tannery ER.
ACM-11	01ZZ-0011	10/6/07 1828	Grab	10 Hughey Street	Suspect ACM sample collected from a property southeast of the Mohawk Tannery ER.
ACM-12	01ZZ-0012	10/6/07 1831	Grab	Hughey Street and Carver Street	Suspect ACM sample collected from a property southeast of the Mohawk Tannery ER.

**Asbestos-Containing Material and Air Samples
START Sample Locations for the
Mohawk Tannery Emergency Response**

Sample Location No.	Scribe No.	Date/ Time (Hours)	Remarks	Sample Location	Sample Description
MATRIX: Air					
Station A	01ZZ-0013	10/6/07 1936	Grab	Junction of Intervale Street, North Intervale Street, and Bitimas Street	Air monitoring sample collected from a location southeast of the Mohawk Tannery Emergency Response (Mohawk Tannery ER).
Station B	01ZZ-0014	10/6/07 1952	Grab	West of intersection of Hutchinson Street and Fairmount Street	Air monitoring sample collected from a location east of the Mohawk Tannery ER.
Station C	01ZZ-0015	10/6/07 1954	Grab	Perimeter of site, along Fairmount Street	Air monitoring sample collected from the perimeter of the Mohawk Tannery property.
Station D	01Z -0016	10/6/07 2003	Grab	Along Chautauqua Avenue	Air monitoring sample collected from a location northeast of the Mohawk Tannery ER.

Attachment E

Chain-of-Custody Record

130703848

130703849 (PLM)

Sampler Signatures: *Colburns*

Weston Solutions, Inc. START
 3 Riverside Drive, Andover, MA 01810
 EPA Contract No. EP-W-05-042

CHAIN OF CUSTODY RECORD

Site #: 01ZZ
 Aaron Benoit
 978-621-1207

(PCM)

No: 01ZZ-10/06/07-0001

10/08/07
 Lab: EMSL

Lab #	Sample #	Location	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	Volume	Total Time
01	01ZZ-0001	ACM-01	Asbestos PLM	Asbestos	10/6/2007	17:12	1	8x8 poly bag	None		
02	01ZZ-0002	ACM-02	Asbestos PLM	Asbestos	10/6/2007	17:20	1	8x8 poly bag	None		
03	01ZZ-0003	ACM-03	Asbestos PLM	Asbestos	10/6/2007	17:22	1	8x8 poly bag	None		
04	01ZZ-0004	ACM-04	Asbestos PLM	Asbestos	10/6/2007	17:31	1	8x8 poly bag	None		
05	01ZZ-0005	ACM-05	Asbestos PLM	Asbestos	10/6/2007	17:40	1	8x8 poly bag	None		
06	01ZZ-0006	ACM-06	Asbestos PLM	Asbestos	10/6/2007	18:01	1	8x8 poly bag	None		
07	01ZZ-0007	ACM-07	Asbestos PLM	Asbestos	10/6/2007	18:07	1	8x8 poly bag	None		
08	01ZZ-0008	ACM-08	Asbestos PLM	Asbestos	10/6/2007	18:13	1	8x8 poly bag	None		
09	01ZZ-0009	ACM-09	Asbestos PLM	Asbestos	10/6/2007	18:18	1	8x8 poly bag	None		
10	01ZZ-0010	ACM-10	Asbestos PLM	Asbestos	10/6/2007	18:22	1	8x8 poly bag	None		
11	01ZZ-0011	ACM-11	Asbestos PLM	Asbestos	10/6/2007	18:28	1	8x8 poly bag	None		
12	01ZZ-0012	ACM-12	Asbestos PLM	Asbestos	10/6/2007	18:31	1	8x8 poly bag	None		
01	01ZZ-0013	Station A	Asbestos PCM	Air	10/6/2007	19:36	1	MCE Cassette	None	803.46	210
02	0177-0014	Station B	Asbestos PCM	Air	10/6/2007	19:52	1	MCE Cassette	None	816.06	210
03	01ZZ-0015	Station C	Asbestos PCM	Air	10/6/2007	19:54	1	MCE Cassette	None	808.08	210
04	01ZZ-0016	Station D	Asbestos PCM	Air	10/6/2007	20:03	1	MCE Cassette	None	773.23	203

Special Instructions: Fax to START office at 978-689-2794, Attn: John Burton

SAMPLES TRANSFERRED FROM
 CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	<i>John Burton</i>	10/6/07	<i>John Burton</i>	10/8/07	08:20						

10/08/2007 12:05 6172255972 EMSL BOS PAGE 05/05

Attachment F

Asbestos Air Cartridge Analyses (Table 1)

SITE: Mohawk Tannery SITE
CASE: D0765F SDG: 01ZZ-0001
LABORATORY: EMSL ANALYTICAL, INC

TABLE 1
ASBESTOS AIR CARTRIDGE ANALYSES
(Fibers/cc)

NOT VALIDATED DATA

		Station A	Station B	Station C	Station D	Lot Blank		
SAMPLE LOCATION:		Station A	Station B	Station C	Station D	Lot Blank		
SAMPLE NUMBER:		01ZZ-0013	01ZZ-0014	01ZZ-0015	01ZZ-0016	01ZZ-0017		
LABORATORY NUMBER:		130703848-0001	130703848-0002	130703848-0003	130703848-0004	130703848-0005		
DATE SAMPLED:		10/6/07	10/6/07	10/6/07	10/6/07	10/6/07		
AIR VOLUME (L):		803.46	816.06	808.08	773.23	NA		
INORGANIC ANALYTES	METHOD	INSTRUMENT DETECTION LIMIT					SITE ACTION LEVEL	
ASBESTOS	PCM	0.003	0.003	0.003 U	0.003 U	0.003 U	0.003 U	0.05

ANALYTICAL METHOD
PCM - Phase Contrast Microscopy
NIOSH 7400, Issue 2, A Rules

NOTE: NA - Not applicable.
U - No Fibers Detected.
cc - Cubic Centimeter.

A Tier I validation only evaluates the PE sample (when one is provided). No qualifiers are applied to the data.

Attachment G

Bulk Asbestos Analyses by PLM (Table 2)

SITE: Mohawk Tannery Emergency Response
 PROJECT: 07100002
 LABORATORY: EMSL

TABLE 2
 BULK ASBESTOS ANALYSES BY PLM
 VOLUME %

SAMPLE LOCATION:	ACM-01	ACM-02	ACM-03	ACM-04	ACM-05	ACM-06
SAMPLE NUMBER:	01ZZ-0001	01ZZ-0002	01ZZ-0003	01ZZ-0004	01ZZ-0005	01ZZ-0006
LABORATORY SAMPLE NUMBER:	130703849-0001	130703849-0002	130703849-0003	130703849-0004	130703849-0005	130703849-0006
DATE SAMPLED:	10/6/07	10/6/07	10/6/07	10/6/07	10/6/07	10/6/07

ANALYTES	METHOD	REPORTING LIMIT							
Actinolite	PLM	1.0	ND						
Amosite	PLM	1.0	ND						
Anthophyllite	PLM	1.0	ND						
Chrysotile	PLM	1.0	ND						
Crocidolite	PLM	1.0	ND						
Tremolite	PLM	1.0	ND						

SAMPLE LOCATION:	ACM-07	ACM-08	ACM-09	ACM-10	ACM-11	ACM-12
SAMPLE NUMBER:	01ZZ-0007	01ZZ-0008	01ZZ-0009	01ZZ-0010	01ZZ-0011	01ZZ-0012
LABORATORY SAMPLE NUMBER:	130703849-0007	130703849-0008	130703849-0009	130703849-0010	130703849-0011	130703849-0012
DATE SAMPLED:	10/6/07	10/6/07	10/6/07	10/6/07	10/6/07	10/6/07

ANALYTES	METHOD	REPORTING LIMIT							
Actinolite	PLM	1.0	ND						
Amosite	PLM	1.0	ND						
Anthophyllite	PLM	1.0	ND						
Chrysotile	PLM	1.0	ND						
Crocidolite	PLM	1.0	ND						
Tremolite	PLM	1.0	ND						

ANALYTICAL METHOD
 PLM - Polarized Light Microscopy with Dispersion Staining
 NIOSH 9002

NOTE: ND - No Fibers Detected.