

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

www.dnr.mo.gov

November 22, 2011

CERTIFIED MAIL #7009 3410 0001 4306 7179  
RETURN RECEIPT REQUESTED

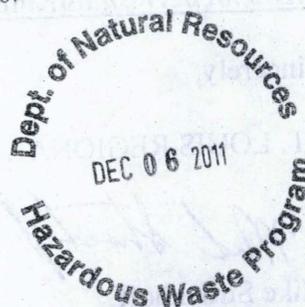
Mr. Gregory Shapiro, V.P. Operations  
Shapiro Brothers  
A Division of MW Recycling, LLC  
P.O. Box 759  
Festus, MO 63028

Dear Mr. Shapiro:

**NOTICE OF VIOLATION #SLR07382748**

Enclosed is a report of a hazardous waste compliance evaluation inspection conducted at Shapiro Brothers, A Division of MW Recycling, LLC (Shapiro), located at 9th & Delmar in Festus, Missouri by Ms. Vickie Heberlie of my staff on September 14, 2011. The section of the report titled "UNSATISFACTORY FEATURES" lists a violation noted during the inspection and outlines steps the inspector has determined will correct the violation. The "COMMENTS" section of the report includes additional recommendations concerning hazardous waste management at the facility. Water pollution and air pollution compliance inspections were also conducted at the facility concurrent with the hazardous waste inspection. Reports of these inspections will be sent to you under separate cover.

Due to the serious nature of the violation, the Department is issuing Notice of Violation (NOV) #SLR07382748. **Within 15 days**, a written response must be submitted that includes a description of the actions taken to correct the violation and/or a schedule for completion of the needed action to correct the violation. The response must also describe the actions taken to address the additional comments included in the report. Please mail your response to the attention of Mr. Dennis Hansen, Missouri Department of Natural Resources, Hazardous Waste Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102-0176. A copy of your response should be sent to Ms. Vickie Heberlie, Missouri Department of Natural Resources, St. Louis Regional Office, 7545 South Lindbergh Blvd, Suite 210, St. Louis, MO 63125.



Shapiro Bros. NOV (HW)

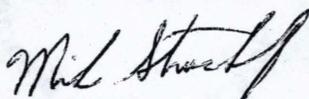
November 22, 2011

Page 2

Your cooperation is appreciated. Should you have any questions, please contact Mr. Evan Bryant of the Hazardous Waste Program at (573) 751-3176, email [evan.bryant@dnr.mo.gov](mailto:evan.bryant@dnr.mo.gov) or Ms. Vickie Heberlie at the Missouri Department of Natural Resources, Jefferson County Satellite Office at (636) 931-5223, email [vickie.heberlie@dnr.mo.gov](mailto:vickie.heberlie@dnr.mo.gov).

Sincerely,

ST. LOUIS REGIONAL OFFICE



Mike Struckhoff  
Regional Director

MS/VLH/jh  
*VLH*

Enclosures

- c: Mr. Dennis Hansen, Hazardous Waste Program ✓
- The Honorable Mike Cage, Mayor, City of Festus
- Mr. Kevin Mohammadi, WPB
- Mr. Larry Lehman, SWMP
- Ms. Nicole Eby, APCP
- Mr. Joseph King, Vice President, MW Recycling, LLC

**RESOURCE CONSERVATION AND RECOVERY ACT**  
**AND**  
**MISSOURI HAZARDOUS WASTE MANAGEMENT LAW**  
**COMPLIANCE EVALUATION INSPECTION REPORT**

**FACILITY:**

Shapiro Brothers  
A Division of MW Recycling, LLC  
9<sup>th</sup> & Delmar Streets  
Festus, MO 63028  
(636) 937-9185

EPA ID#: None  
MO ID #: None  
Resource Recovery: NA

**PARTICIPANTS:**

Department of Natural Resources

Vickie L. Heberlie, Darren Bernat  
James Hessel, Evan Bryant  
Sean Counihan  
Environmental Specialists

Shapiro Brothers  
A Division of MW Recycling, LLC

Gregory Shapiro, VP of Operations  
Dave Shapiro, VP of Commercial

NPN Environmental

David Rowe, Brian Gregory  
Engineers

**INTRODUCTION:**

On September 14, 2011, a hazardous waste compliance evaluation inspection was conducted at Shapiro Brothers, Division of MW Recycling, LLC (Shapiro), located at the above address. The compliance evaluation inspection was conducted under the authority of the Resource Conservation and Recovery Act (RCRA) of 1976 and Sections 260.375(9) and 260.377 of the Missouri Hazardous Waste Management Law (1977) as amended. The purpose of the inspection was to determine the facility's compliance with the Missouri Hazardous Waste Management Law and Regulations. The generator compliance evaluation inspection was conducted by Ms. Heberlie. A wastewater treatment inspection was conducted by Mr. Hessel. An air pollution inspection was conducted by Mr. Bernat. Those reports will be sent under a separate cover.

The inspections were conducted in response to a complaint received from the City of Festus concerning sediment being tracked onto city streets from the site. Sampling of the sediment conducted by the city indicated elevated lead levels in the sediment.

**FACILITY DESCRIPTION:**

Shapiro is a full service scrap metal processing facility located in eastern Missouri. Company operations include scrap metal processing facilities in Festus, Missouri and Moberly, Missouri. The Festus facility has been at 9<sup>th</sup> and Delmar Streets since 1946. Hours of operation are 7:00 am to 5:00 pm, Monday through Friday. The scrap metal processing operations occupy 8 acres of the 15-acre site, which is bordered on the east by retail businesses and on the west by residential areas. The Festus facility currently has 40 employees. On September 16, 2011, Shapiro Brothers, Inc. was sold to PSC Metals. Shapiro Brothers is now a division of M W Recycling, LLC.

Shapiro primarily deconstructs old railroad cars, including tanker cars that are certified empty and clean. In addition to deconstructing railroad cars, the facility processes automobiles and miscellaneous metal parts for scrap metal. Shapiro accepts automobiles from licensed salvage dealers and requires all fluids be drained from the vehicles prior to acceptance. The railcars go through a stationary shearing process prior to being cut, shredded and bailed. After the material is shredded, the material gets separated. A large magnet pulls the metal out of the shredded residue and the final product gets sent to various steel foundries for additional processing. The remaining material is sent through a separate conveyor system and gets deposited into the automobile shredder residue (auto fluff) pile. The specific wastes associated with auto fluff include foam, rubber, plastic, fabric, carpet, metallic pieces, wire, dirt and glass. The auto fluff is then used as Alternate Daily Cover (ADC) at the IESE Timber Ridge Landfill.

Shapiro uses an integrated water recycling system to wash tires and wheels of trucks upon exiting the scrap yard. The system was installed approximately three weeks prior to the inspection. The wash water drains into a 2,500-gallon self-contained underground holding tank from which it is reused. Flocculant is added to the tank to allow solids to settle out. The system continually scrapes the solids from the bottom of the tank and disposes of the dewatered solids through a discharge shoot into a ½-yard metal holding bin where they are stored for future disposal.

Shapiro generates the following waste streams:

1. Street Sweeping Sediments: The waste stream consists of street sweepings from a vacuum sweeper that sweeps sediments from nearby streets one to two times per day. An undetermined amount of street sweepings is generated monthly. The material is currently being put into the auto shredder residue pile, which then goes to the landfill in the form of auto fluff to be used as Alternate Daily Cover (ADC).
2. Dewatered Solids (D008): The waste stream consists of dewatered solids and sediments from the tire and wheel truck wash. At the time of the inspection, the dewatered solids had not been characterized or disposed of yet. The steel container holding the solids is approximately a ½-yard in size.

3. Auto Shredder Residue (Auto Fluff): Less than 1,000 tons per month of auto fluff is delivered by KA Pazdera Hauling to IESI's Timber Ridge Landfill for use as ADC. A TCLP analysis needs to be done for a hazardous waste determination on the fluff material.
4. Used Oil (Non-RCRA Regulated): Used oil is generated from maintenance activities at the maintenance shop. Used oil is also generated from maintenance of loaders, gear boxes, trucks and other equipment. Approximately 250 gallons are generated yearly in an above ground tank, which is stored outside. Heritage-Crystal Clean, LLC handles the recycling of the used oil.
5. Batteries (Non-Universal Waste): Batteries are generated from maintenance of equipment. The batteries are stored in the non-ferrous building on-site before they are shipped to the Granite City facility for accumulation. The batteries are managed under 40 CFR 266.88. The batteries are sent to Doe Run – Boss for reclamation.

#### **UNSATISFACTORY FEATURES:**

1. **Failure to determine if waste is hazardous, in violation of 10 CSR 25-5.262(1) incorporating 40 CFR 262.11.** Shapiro has not determined if the dewatered solids from the truck wash system are a hazardous waste. The solids are currently accumulated in a storage bin onsite. Since the truck wash system had only been in place for three weeks prior to the inspection, Mr. Greg Shapiro stated that the solids had not yet been characterized or disposed of. Sampling conducted by the Department of the dewatered solids at the time of the inspection indicated that the solids are a D008 hazardous waste (Sample #AB59475). Sample analysis results are included in the RCRA Site Investigation Report (see Attachment), prepared by the Environmental Services Program.

Shapiro must manage the dewatered solids from the truck wash system in accordance with the Missouri Hazardous Waste Management Law and Rules, including proper management while accumulated onsite (i.e. package, mark, label, storage time limits, etc...) and disposal at a permitted treatment, storage or disposal facility. The bin utilized to accumulate the solids must be maintained in good condition and waste must not be allowed to discharge from the bin.

Shapiro must determine the generation rate and/or accumulation rate of the waste and submit a Notification of Regulated Waste Activity (NORWA) Form to register at the applicable generator status. A NORWA Form and a Hazardous Waste Generator Status Guidance Bulletin are enclosed.

Street sweeping waste is currently disposed of in the auto fluff pile. Shapiro has not determined if this waste is hazardous. Soil samples were collected from roadways and staging areas within the site. The analytical results of the samples indicated high concentrations of lead (failed TCLP) in several of the samples (#AB59477, #AB59478, #AB59479). As a result, the sediment tracked onto the streets potentially could contain

high lead levels. Further, sampling conducted recently by the City of Festus of sediment accumulated on roadways adjacent to the site has indicated high concentration of lead.

Shapiro must immediately cease disposing of the street sweeping waste in the fluff pile until a hazardous waste determination can be made on the material. Information used to make the determination (such as lab analysis results) must be submitted to the Department. In addition, Shapiro must store the street sweeping waste in a manner that will prevent its' release to the environment (i.e. closed container).

**COMMENTS:**

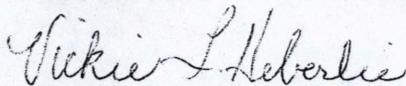
1. Based on levels of lead found on-site, as well as the disposal of street sweeping waste into the fluff pile, the auto fluff has the potential to exhibit the hazardous waste characteristic of toxicity for heavy metals (lead).

The Department strongly recommends that Shapiro make a hazardous waste determination of the auto fluff currently generated at the facility. Information used to make the determination (such as lab analysis results) must be submitted to the Department. The Department recommends that Shapiro cease sending the auto fluff offsite for use as Alternate Daily Cover until a determination is made.

2. Based on elevated levels of lead found throughout the soil on-site, Shapiro must take actions to ensure hazardous constituents are not allowed to leave the property via vehicles tracking sediment off the property, airborne dust blowing from the site or storm water discharging off the site. Once the material leaves the property, it is considered disposal of hazardous waste into the environment. Additional information on the air and water pollution requirements will be provided in separate correspondence.

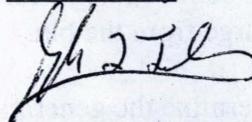
Technical guidance concerning hazardous waste generator status guidance, hazardous waste management and notification of regulated waste activity forms can be obtained from the Department's website at <http://dnr.mo.gov/pubs/index.html#HazardousWaste>.

Prepared by:



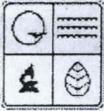
Vickie L. Heberlie  
Environmental Specialist III  
Jefferson County Satellite Office

Reviewed by:



Joseph L. Trunko  
Waste Management Unit Chief  
St. Louis Regional Office

VLH/JLT/jh



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
NOTICE OF VIOLATION

TRACKING NUMBER  
**SLR 20111110 07382748**

DATE ISSUED <i>11-22-11</i>	TIME ISSUED	REGION/PROGRAM St. Louis Regional Office (SLRO)
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SOURCE (NAME, ADDRESS, PERMIT NUMBER, LOCATION)  
Shapiro Brothers, Division of MW Recycling, LLC  
9th & Delmar Streets  
Festus, MO 63028  
MOR000021907 / 036446

MAILING ADDRESS P.O. Box 759	CITY Festus	STATE MO	ZIP CODE 63028
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NAME OF OWNER OR MANAGER Mr. Greg Shapiro	TITLE OF OWNER OR MANAGER Vice President of Operations	COUNTY Jefferson
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LAW, REGULATION OR PERMIT VIOLATED  
10 CSR 25-5.262(1) incorporating 40 CFR 262.11

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NATURE OF VIOLATION Failure to determine if waste is hazardous	DATE(S): 09-14-2011	TIME(S):
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SIGNATURE (PERSON RECEIVING NOTICE) <i>Sent by Certified Mail</i>	SIGNATURE (PERSON ISSUING NOTICE) <i>Vickie Heberlie</i>
TITLE OR POSITION	TITLE OR POSITION ES III / SLRO-JCSO

**ADDENDUM**

**LOCATIONAL DATA**

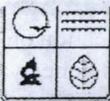
UTM EASTING	UTM NORTHING
HORIZONTAL COLLECTION METHOD	ESTIMATED POSITION ERROR    OR    PDOP
REFERENCE POINT	COORDINATE DATA SOURCE

**ADDITIONAL COMMENTS**

Blank area for additional comments.

IMAGE 1

IMAGE 2



**SMALL QUANTITY GENERATOR INSPECTION CHECKLIST**

S

FOR FACILITIES THAT GENERATE/ACCUMULATE <1000 Kg (2,200 lbs, or approximately 5 drums and <2.2 lbs of acutely hazardous waste)

NAME Shapiro Brothers, Div of MW Recycling		DATE 09-14-2011		EPA ID NUMBER	
ADDRESS 9th & Delmar Streets		RR NUMBER	MO ID NUMBER	TELEPHONE NUMBER (636) 937-9185 ext	
CITY Festus	COUNTY Jefferson	ZIP CODE 63028	YEARS AT SITE 65	NUMBER OF EMPLOYEES 40	
DATE OF LAST INSPECTION 07-08-2008	REGIONAL OFFICE St. Louis Regional Office (SLRO)		TRACKING NUMBER <b>SLR 20111107 15425652</b>		
PRIMARY CONTACT NAME Mr. Greg Shapiro		PRIMARY CONTACT TITLE VP of Operations			
SECONDARY CONTACT NAME Mr. Dave Shapiro		SECONDARY CONTACT TITLE VP of Commercial			

**CHECKLIST ATTACHMENTS**

USED OIL GENERATOR <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	RESOURCE RECOVERY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	TANK ATTACHMENT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	UNIVERSAL WASTE ATTACHMENT <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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**DESCRIPTION OF THE FACILITY'S OPERATIONS AND PLANT**

Included in narrative report.

**WASTE STREAMS**

DESCRIBE EACH WASTE STREAM GENERATED (INCLUDING THE PRODUCTION PROCESS)	GENERATION RATE	EPA WASTE CODES	DISPOSITION
1. Street Sweeping Sediments: Generated from street sweeping sediments from nearby streets.	Undetermined	Undetermined	Auto Shredder Fluff - Sanitary Landfill
2. Dewatered Solids (RCRA Regulated): Generated from tire and wheel truck wash for trucks exiting scrap yard.	Undetermined	D008	Unknown
3. Auto Shredder Fluff: Generated from shredding of railroad cars, automobiles, and miscellaneous metal. Includes rubber, foam, plastic, wire, carpet, fabric, dirt, glass, etc.	Undetermined	Undetermined	Alternate Daily Cover (ADC) - Sanitary Landfill
4. Used Oil (Non-RCRA Regulated): Used oil is generated from maintenance activities at the maintenance shop and maintenance of equipment.	Approximately 250-G / year	na	Heritage Crystal-Clean,
5. Batteries (Non-Universal Waste): Batteries are generated from maintenance of equipment. The batteries are managed under 40 CFR 266.88.	Undetermined	na	Reclamation at Doe Run - Boss
6.			

GENERAL		COMMENTS				
NO	YES	NA				
1.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Registered as a hazardous waste generator - Section 260.380.1(1) RSMo and 10 CSR 25.5.262(2)(A).	1	Shapiro's has not done a hw determination on the dewatered truck solids. Analysis done by the Dept. on 9-14-11 indicates truck wash solids are a D008 hazardous waste. A HW determination has not been done on the auto shredder residue (aka auto fluff) or the street sweeping sediments currently being put into the auto fluff pile, which goes to a sanitary landfill as Alternate Daily Cover.  Based on elevated lead levels found on-site, Shapiro needs to do a HW determination of the dewatered solids, street sweeping sediments and auto fluff material.
2.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Facility determines if waste is hazardous - 10 CSR 25-5.262(1) incorporating 40 CFR 262.11.	1	
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uses a licensed hazardous waste transporter - Section 260.380.1(5) RSMo.	1	
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Uses authorized hazardous Waste TSD or RR facility - Section 260.380.1(7) RSMo.	1	
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Does not operate as a TSD - Section 260.390.1(1) RSMo.	1	
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Facility has updated notification as required - 10 CSR 25-5.262(2)3.B.	2	
7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Materials are not accumulated speculatively - 10 CSR 25-4.261 incorporating 40 CFR 261.1(c)(8).	2	
8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Facility can demonstrate legitimate recycling - 10 CSR 25-4.261 incorporating 40 CFR 261.2(f).	2	

**PART 1: WALK-THROUGH INSPECTION**

B. PRETRANSPORT, CONTAINERIZATION & STORAGE		COMMENTS				
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Storage does not exceed 180 days or 270 days if transported > 200 miles - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d) or 40 CFR 262.34(e).	1	
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers in good condition - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(2) referencing 40 CFR 265.171.	1	
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Waste compatible with container - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(2) referencing 40 CFR 265.172.	1	
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers closed in storage - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(2) referencing 40 CFR 265.173(a).	1	
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers storing incompatible waste separated or protected from each other by a dike, berm or wall - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(2) referencing 40 CFR 265.177(c).	1	
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers of ignitable or reactive waste stored > 50 ft. from property line (or meet requirements) - 10 CSR 25-5.262(2)(C)6 referencing 40 CFR 265.176 as amended by 10 CSR 25-7.265(2)(1) 7 & 8.	2	
7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Waste packaged/labeled/marked per DOT during entire on-site storage period - 10 CSR 25-5.262(2)(C)1.	2	
8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date of accumulation marked on containers - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 262.34(a)(2).	2	
9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers protected from contact with accumulated liquids - 10 CSR 25-5.262(2)(C)2.D(II).	2	
10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers clearly marked "Hazardous Waste" - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 262.34(a)(3).	2	
11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Facility inspected and maintained (weekly) - 10 CSR 25-5.262(2)(C)2.C(I)&(II) referencing 40 CFR 265.174.	2	
12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Daily inspection of areas subject to spills, i.e., waste handling areas - 10 CSR 25-5.262(2)2.C(II).	2	
13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Adequate aisle space is available - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 265.35.	2	
14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Placards available for transporter - 10 CSR 25-5.262(1) incorporating 40 CFR 262.33.	2	
15.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Precautions are taken to prevent accidental ignition or reaction of ignitable or reactive wastes, including confining smoking and open flame to specially designated locations and conspicuously placing "No Smoking" signs by ignitable or reactive wastes - 10 CSR 25-5.262(2)(C)2.F(II).	2	

NO YES NA				COMMENTS
1.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Containers kept closed - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(C)(1)(i) referencing 40 CFR 265.173(a).	1	
2.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Containers in good condition - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(c)(1)(i) referencing 40 CFR 265.171.	1	
3.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Waste compatible with container - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(c)(1)(i) referencing 40 CFR 265.172.	1	
4.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Quantities accumulated not exceeding 55 gallons (1 quart of acutely hazardous wastes) - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(c)(1).	1	
5.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Satellite containers go to storage within 3 days of filling - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(c)(2).	1	
6.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Container marked identifying contents and beginning date - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(c)(1)(ii) as modified by 10 CSR 25-5.262(2)(C)3.	2	
7.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Stored in satellite areas less than 1 year - 10 CSR 25-5.262(2)(C)3.	2	
8.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Satellite containers stored at or near the point of waste generation and under the control of the operator - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(c)(1).	2	
<b>D. PREPAREDNESS, PREVENTION AND EMERGENCY PROCEDURES</b>				<b>COMMENTS</b>
1.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Facility operated and maintained to minimize the possibility of an emergency - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(a)(4) referencing 40 CFR 265.31.	1	
2.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Adequate and proper spill control, decontamination and safety equipment available (fire blankets, respirators, SCBA, absorbents, etc.) - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 265.32 as amended by 10 CSR 25-5.262(2)(C)2.G.	2	
3.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Adequate water supply and fire control equipment - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 265.32(c) and (d).	2	
4.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Communication and emergency equipment tested and maintained - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 265.33.	2	
5.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Emergency Coordinator's name and phone number posted near phone - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(5)(ii)(A).	2	
6.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Telephone number of fire department posted near phone - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(5)(ii)(C).	2	
7.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Location of fire extinguisher and spill control equipment posted near phone - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(5)(ii)(B).	2	
8.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Employees familiar with waste handling and emergency procedures - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(5)(iii).	2	
9.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Device in the hazardous waste operation area capable of summoning emergency assistance - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 265.34(a).	2	
10.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Telephone or two-way radio on-site and capable of summoning local fire or police department, or local or state emergency response teams - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 265.32(b).	2	
11.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Arrangements with local emergency agencies - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(4) referencing 40 CFR 265.37.	2	
12.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Emergency coordinator(s) on premise or on call - 10 CSR 25-5.262(1) incorporating 40 CFR 262.34(d)(5)(i).	2	

**E. MANIFESTS**

**COMMENTS**

NO	YES	NA			
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Facility uses manifest system or wastes reclaimed under contractual agreement - Section 260.380.1(6) RSMo and 10 CSR 25-5.262(2)(B) or 10 CSR 25-5.262(1) incorporating 40 CFR 262.20(e)1.	1
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tests waste or uses knowledge of waste to determine if the waste is restricted from land disposal - 10 CSR 25-7.268(1) incorporating 40 CFR 268.7(a).	1
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Generator maintains a copy of the reclamation agreement on-site for at-least 3 years after expiration of agreement - 10 CSR 25-5.262(1) incorporating 40 CFR 262.20(e)(2).	2
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Manifests maintained for a 3-year period - 10 CSR 25-5.262(1) incorporating 40 CFR 262.40(a).	2
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Generator's EPA ID number - 10 CSR 25-5.262(1) incorporating 40 CFR 262.20(a) as amended by 10 CSR 25-5.262(2)(B)1.	2
6.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Generator's name, address and phone number - 10 CSR 25-5.262(2)(B)1.	2
7.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All transporter's names and EPA ID numbers - 10 CSR 25-5.262(2)(B)1 & 2.	2
8.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Designated facility name, address, phone number and EPA ID numbers - 10 CSR 25-5.262(2)(B)1 & 2.	2
9.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOT shipping name, Hazard class and waste ID number (RQ - if required) - 10 CSR 25-5.262(2)(B)1 & 2.	2
10.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Containers and Quantity - 10 CSR 25-5.262(2)(B) 1 and 2.	2
11.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Manifest signed and dated - 10 CSR 25-5.262(2)(B) 1.	2
12.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Manifest returned within 35 days - or exception report submitted within 45 days - 10 CSR 25-5.262(2)(D)2.C.	2
13.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	"Land-Ban" notification/certification sent with manifests or with first shipment - 10 CSR 25-7.268(1) incorporating 40 CFR 268.7(a).	2
14.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Notification/Certification includes correct EPA hazardous waste number, corresponding treatment standards, manifest number, and waste analysis data - 10 CSR 25-7.268(1) incorporating 40 CFR 268.7(b).	2

**COMMENTS: INCLUDE DISCUSSION OF FACILITY'S WASTE MINIMIZATION PLAN**

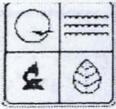
Blank area for providing comments on the waste minimization plan.

APC	PDW	SWM	HW	WPC
<input type="checkbox"/> Fugitive Dust	<input type="checkbox"/> Taste & Odors	<input type="checkbox"/> Open Dumps	<input checked="" type="checkbox"/> Transportation	<input type="checkbox"/> Animal Waste
<input type="checkbox"/> Particulate	<input type="checkbox"/> Bacteria	<input type="checkbox"/> Littering	<input type="checkbox"/> PCBs	<input type="checkbox"/> ByPassing
<input type="checkbox"/> Burning	<input type="checkbox"/> Pressure	<input type="checkbox"/> Waste Tire Dump	<input type="checkbox"/> USTs/LUSTs	<input type="checkbox"/> Treatment Plant Operation
<input type="checkbox"/> Asbestos	<input type="checkbox"/> Color	<input type="checkbox"/> SLF	<input type="checkbox"/> Other	<input type="checkbox"/> Sawdust
<input type="checkbox"/> Odors	<input type="checkbox"/> Flow	<input type="checkbox"/> Other		<input type="checkbox"/> Sludge
<input type="checkbox"/> Toxics	<input type="checkbox"/> Toxics			<input type="checkbox"/> Single Family
<input type="checkbox"/> Other	<input type="checkbox"/> Other			<input type="checkbox"/> Ground Water
				<input type="checkbox"/> Storm Water
				<input type="checkbox"/> Toxics/UST
				<input type="checkbox"/> Other

**COMMENTS**

Blank area for handwritten or typed comments.

INSPECTOR'S SIGNATURE: *Pickie L. Heberle* DATE: 09-14-2011



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
HAZARDOUS WASTE PROGRAM

**SMALL QUANTITY GENERATOR - USED OIL ATTACHMENT**

**S-O**

NAME Shapiro Brothers, Div of MW Recycling	EPA ID NUMBER
CITY Festus	MO ID NUMBER

**USED OIL GENERATOR**

(If Used Oil Processor, Re-refiner, Marketer, Collection, Aggregation Point, Transporter, or Transfer Facility, Please use Appropriate Checklist).

F. USED OIL STORAGE			COMMENTS
NO	YES	NA	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Used oil is managed properly and not disposed of into the environment or cause a public nuisance - 10 CSR 25-11.279(2)(B)4.B.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Containers in good condition - 10 CSR 25-11.279(1) incorporating 40 CFR 279.22(b)(1).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Containers storing used oil are not leaking - 10 CSR 25-11.279(1) incorporating 40 CFR 279.22(b)(2).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Containers / aboveground tanks are labeled or marked clearly "used oil" - 10 CSR 25-11.279(1) incorporating 40 CFR 279.22(c)(1).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Fill pipes used to transfer used oil into underground storage tanks are labeled or marked clearly "used oil" - 10 CSR 25-11.279(1) incorporating 40 CFR 279.22(c)(2).
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Containers/tanks which are exposed to rainfall are closed - 10 CSR 25-11.279(2)(C)6.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clean up any spills or leaks of used oil - 10 CSR 25-11.279(1) incorporating 40 CFR 279.22(d).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mixtures of used oil and hazardous waste are managed according to state hazardous waste regulations - 10 CSR 25-11.279(2)(B)2.

G. ON-SITE BURNING			COMMENTS
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Burn only their own used oil or used oil from DIY'ers or exempt farmers - 10 CSR 25-11.279(1) incorporating 40 CFR 279.23(a) as amended by 10 CSR 25-11.279(2)(A)1.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Burn only in space heaters with design capacity < .5 million BTU/hr - 10 CSR 25-11.279(1) incorporating 40 CFR 279.23(b).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Combustion gases from the heater are vented to the ambient air - 10 CSR 25-11.279(1) incorporating 40 CFR 279.23(c).

H. OFF-SITE SHIPMENTS TO APPROVED COLLECTION CENTERS			COMMENTS
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Used oil is transported by transporters who have obtained EPA identification numbers unless one of the following is met - 10 CSR 25-11.279(1) incorporating 40 CFR 279.24.
<b>40CFR 279.24(a)</b>			
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Transports used oil in a vehicle owned by the generator or owned by an employee of the generator - 10 CSR 25-11.279(1) incorporating 40 CFR 279.24(a)(1).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Transports no more than 55 gallons of used oil at any time - 10 CSR 25-11.279(1) incorporating 40 CFR 279.24(a)(2).
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Transports the used oil to a used oil collection center that is registered, licensed, permitted or recognized by a state/county/municipal government to manage used oil - 10 CSR 25-11.279(1) incorporating 40 CFR 279.24(a)(3).
<b>OR 40 CFR 279.24(b)</b>			
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Transports the used oil to an aggregation point that is owned by and/or operated by the same generator - 10 CSR 25-11.279(1) incorporating 40 CFR 279.24(b)(3).
<b>OR 40 CFR 279.24(c)</b>			
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Used oil is reclaimed under a contractual agreement (tolling arrangement) - 10 CSR 25-11.279(1) incorporating 40 CFR 279.24(c).

ADDENDUM

**LOCATIONAL DATA**

UTM EASTING	UTM NORTHING
HORIZONTAL COLLECTION METHOD	ESTIMATED POSITION ERROR    OR    PDOP
REFERENCE POINT	COORDINATE DATA SOURCE

**ADDITIONAL COMMENTS**

*(This area is currently blank for additional comments.)*

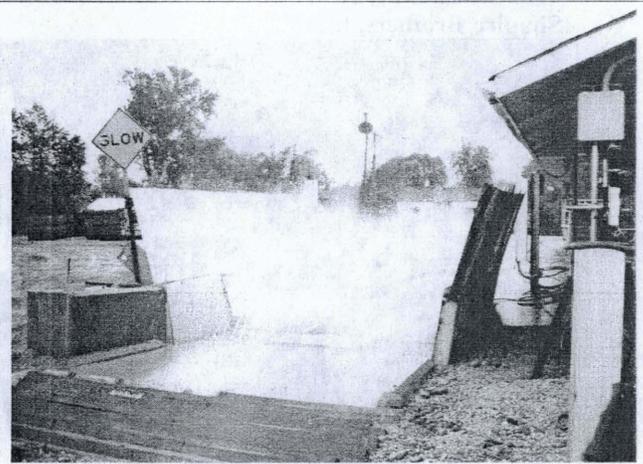
IMAGE 1

IMAGE 2



IMG 0460

View of facility entrance at 9<sup>th</sup> & Delmar Streets. Recently rented vacuum street sweeper not in use during inspection due to heavy rain.



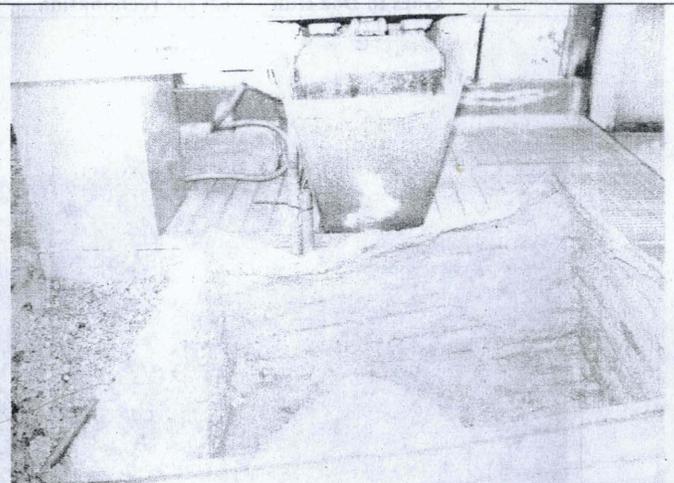
IMG 0461

View of new truck tire and wheel wash system located near facility entrance/exit at 9<sup>th</sup> & Delmar Sts.



IMG 0463

View of de-watered solids from truck wash deposited in open bin, located outside.



IMG 0464

Another view of bin holding de-watered solids from truck wash.



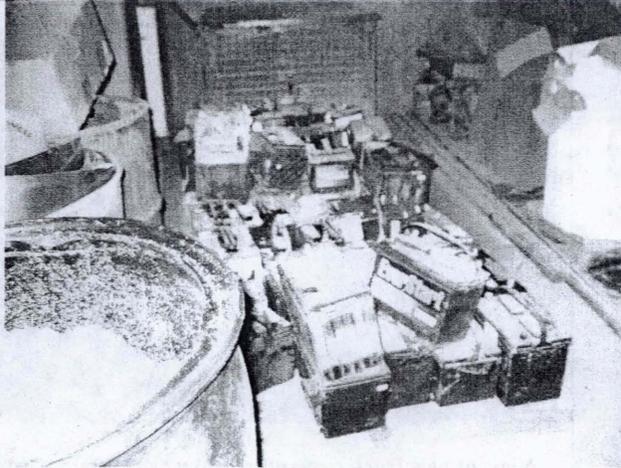
IMG 0466

View of bottom of bin holding HW de-watered solids. Rainwater falling into bin is being released out bottom of bin and draining into on-site storm drain.



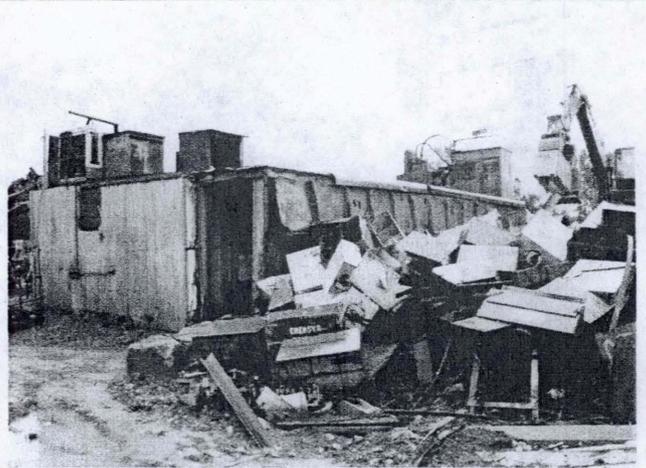
IMG 0467

View of storm drain, just east of truck wash station, where storm water is running out of HW de-watered solids catch basin onto the ground.



IMG 0469

Batteries stored on-site in non-ferrous building.  
Goes to Doe Run – Boss for reclamation.



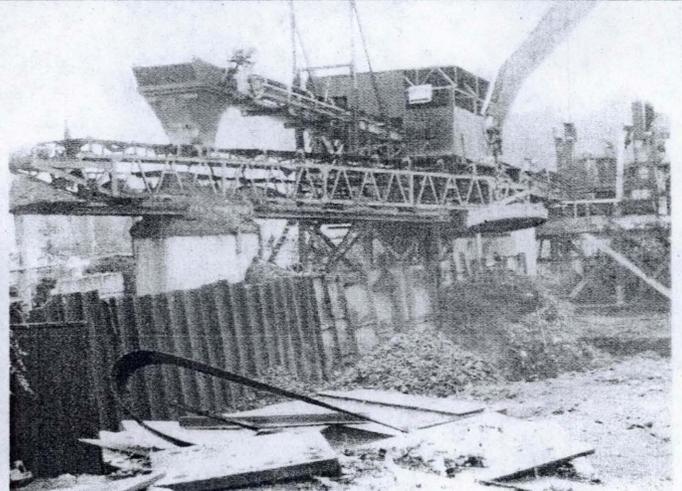
IMG 0472

View of staging pile consisting of miscellaneous  
metal received at facility.



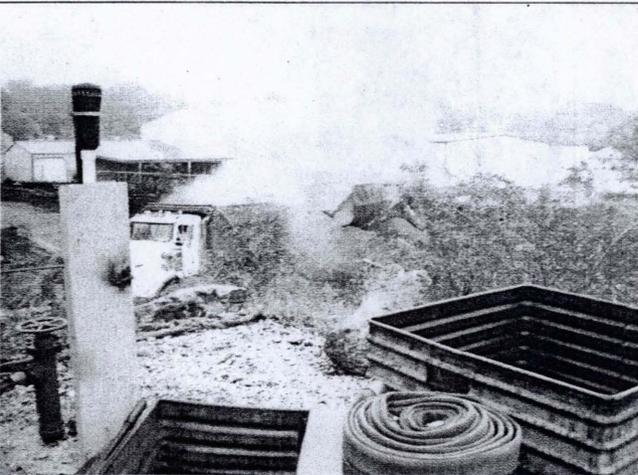
IMG 0473

Auto shredder residue (auto fluff) pile.



IMG 0475

View of metals being separated from auto fluff material.



IMG 0477

View of auto fluff being loaded into dump truck destined  
for sanitary landfill as alternate daily cover. Dust being  
generated during loading process.

**RCRA SITE INVESTIGATION REPORT  
SHAPIRO BROTHERS, INC. SCRAP YARD  
SITE**

**Order Number: 110915002**

**Jefferson County**

**Festus, Missouri**

**Site Information:**

ESP LDPR Code: FERCA

ESP Lead: Sean Counihan

Job Code: NJ12SHAP

Investigation Date: 9/14/2011

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**Introduction:**

The Missouri Department of Natural Resources (MDNR), Hazardous Waste Program (HWP), requested the MDNR, Environmental Services Program (ESP) to conduct sampling as part of an investigation at a site identified as the Shapiro Brothers Inc. Scrap Yard Site. The HWP was represented at the site by Evan Bryant. Vickie Heberlie, Jim Hessel, and Darren Bernat from the MDNR St. Louis Regional Office were on hand to conduct a multi-media inspection. Sampling was conducted in order to determine if any hazardous material was present and possibly moving off site.

The site is Shapiro Brothers, Inc. located at 9<sup>th</sup> Street and Delmar Street, Festus, Missouri. Shapiro Brothers, Inc. is a scrap metal processor. Shapiro Brothers is a demolition contractor, Union Pacific often uses them to dismantle out of service rail cars, and they offer transportation services to their clients for scrap metal materials. All metals are brought to their location to be processed with a 450 horsepower shear or 3500 horsepower shredder. The metal is processed and compressed into sizes that are accepted by a steel mill for recycling. All non-metal items are separated out (auto fluff) during the process and taken to a landfill. This site has come under question because of some complaints, to the City of Festus by nearby residents, of the dust the site creates. The City collected a composite soil sample from street debris surrounding the site (9<sup>th</sup>, Delmar, and Vine). The results from analysis on that sample failed TCLP for lead. The site latitude and longitude are 38.23001°, -90.39035°. Information in this report will be used in determining the need for additional actions at the subject site.

### **Field Methods:**

Site access was granted from the owner of the property at the time of inspection. Samples were collected from nine locations throughout the site (six soil samples and three surface/storm water samples). Sampling data and observations were recorded in a bound field logbook. New stainless steel spoons were used to collect each surface soil grab sample and the containers for water sample collection were immersed directly into the water/stream. Appropriate containers and chemical preservation techniques were employed during field activities. Eight-ounce glass jars were used to collect soils for analysis of seven RCRA metals including arsenic (As), barium (Ba), cadmium (Cd), chromium (Cr), lead (Pb), selenium (Se) and silver (Ag). Surface water run off was collected in two – one liter amber glass bottles for oil and grease analysis, and one – 250ml Nalgene bottle for total metals analysis for seven RCRA metals including arsenic (As), barium (Ba), cadmium (Cd), chromium (Cr), lead (Pb), selenium (Se) and silver (Ag). All samples received a numbered label and the corresponding number entered onto a chain-of-custody form indicating the description, location, date and time of collection, and analytes requested. Samples were stored and transported on ice in coolers. ESP field personnel maintained custody of the samples until relinquishing them to a sample custodian at the state's environmental laboratory within the Environmental Services Program in Jefferson City for analyses.

### **Observations:**

The weather was cloudy and rainy with temperatures around 70 degrees Fahrenheit. The inspection team arrived on site around 0900 hours. The site owner, Greg Shapiro, was not on site and requested that we start our inspection upon his arrival. Mr. Shapiro arrived around 0945. His brother Dave Shapiro, along with NPN Environmental Consultants Dave Rowe and Brian Gregory were also present for the inspection. The inspection started with a meeting with the owners, followed by a walkthrough of the facility property where sampling locations were determined.

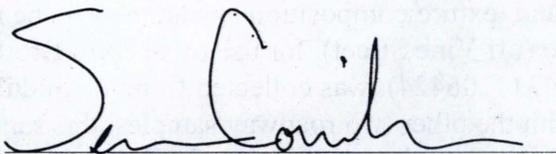
Sampling began just before 1200 hours. The facility installed a truck wash station at the main entrance to the facility several weeks ago. This station would wash the tires and undercarriage of vehicles entering and leaving the site. The water from the wash would be circulated through the wash jets with new water being introduced periodically to keep the system with a certain volume of water. All solid particles that were removed during the wash settled to the bottom. A series of scrapers attached to a conveyor belt removes the solids to a container on the exterior of the machine. This waste will be mixed with other material to be sent to a landfill. Since this is a new system this waste stream has not been tested or characterized. No discharged material from this machine has been disposed of up to the time of sampling. Sample 1 (1106418) was a surface water sample from the wash station. This sample was brown in color and very turbid. It also appeared oily. Sample 2 (1106419) was a soil/sediment sample collected from the discharge container of the wash station. This sample was gray to light brown in color, and had a variety of particle sizes from silt to gravel. The property has a storm water drain near the

truck wash station. It collects storm water that flows down hill from the operations part of the facility, as well as overspray from the wash station, and drainage from the front entrance. A small creek flows along the east border of the facility property. This storm drain has an outfall to the creek at the south east corner of the property. Sample 3 (1106420) was collected from this outfall. This location is near the junction of the railroad crossing on 9<sup>th</sup> Street. The sample was mostly clear with a slight amount of turbidity. Sample 4 (1106421) was a soil sample collected from the center of the road (near the entrance) north of the truck wash and north of the non-ferrous building. The sample was silt/gravel mixture with a light brown to caramel color. Traveling north through the facility two staging piles are encountered. The first one encountered contains mainly industrial type metals, which is processed through one machine. The other pile, mainly automobiles, is processed through a different machine. A soil sample was collected from an open spot at the bottom of the first pile along the edge. This was Sample 5 (1106422). This sample had dark brown to black color. Another roadway soil sample, Sample 6 (1106423), was collected about midway through the facility property (heading north) along the main road on the west side of the property. This sample had the same color and texture/composition as Sample 4. The north end of the property has another entrance (off Vine Street), for use by Shapiro Brothers trucks only. A soil sample, Sample 7 (1106424), was collected from the middle of the roadway at this entrance. As with the other two roadway samples, this sample was a light brown/caramel color with varying composition. The auto fluff pile was at the north east end, down gradient, and directly across from the Vine Street entrance. This is the pile of all non-metal materials that was separated out of the shredders. They load this material in large trucks and haul to a landfill daily. Sample 8 (1106425) was a soil sample collected from exposed soil in this area. The soil was variable in color from black to light brown and had auto fluff mixed with the top layer of soil. Another storm water outfall exists on the north side of the facility fence. This is storm water runoff from the roadways. It once drained onto facility property, but because of interference with operation, Shapiro Brothers took it upon themselves to bury the line and run it underground to the stream. There is a small junction that is exposed where the line comes out from the street and where Shapiro Brothers put in a drain. A water sample was collected from this outfall, Sample 9 (1106426). Sample 9 was clear and colorless. Refer to sampling locations map and site photographs (Appendix C).

**Results:**

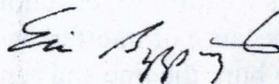
The analytical results are attached to this report as Appendix A. Chain of custody records are attached as Appendix B. Site photographs and a sampling locations map are attached as Appendix C. Field notes are attached as Appendix D.

Submitted by:



Sean Counihan  
Environmental Specialist  
Field Services Unit  
Environmental Services Program

Approved by:



Digitally signed by Eric Sappington  
DN: cn=Eric Sappington, c=US,  
o=Missouri Department of Natural  
Resources, ou=ESP-EER,  
email=eric.sappington@dnr.mo.gov  
Date: 2011.11.03 13:32:15 -05'00'

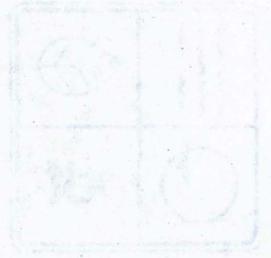
Eric Sappington  
Unit Chief  
Field Services Section  
Environmental Services Program

BA:smc

c: Evan Bryant, HWP

# Appendix A

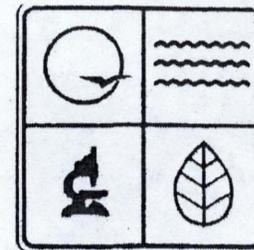
## Shapiro Brothers, Inc. Scrap Yard Site Analytical Results



Wisconsin Department of Natural Resources  
Environmental Laboratory  
10033011  
11/10/2000  
Shapiro Brothers, Inc. Scrap Yard Site  
10033011  
11/10/2000



**Missouri Department of Natural Resources  
Environmental Services Program**



**Order ID** 110915002

**Program, Contact:** HWP Dennis Hanson

**Report Date:** 10/03/2011

**LDPR/JobCode:** FERCA / NJ12SHAP



**Sample:** AB59474



**Customer #:** 1106418

**Facility ID:**  
**County:** Jefferson

**Site:** Shapiro Brothers  
**Sample Reference ID:**

**Collector:** SEAN COUNIHAN

**Affiliation:** ESP

**Collect Date:** 9/14/2011 12:05:00PM

**Entry Point:**

**Sample Comment:** Grab sample #1106418, collected from Wash Station.

est	Parameter	Result	Qualifier	Units	QC Batch ID	Method
20 Metals-Total Recoverable	Arsenic	10.8		µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Barium	775	09	µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Cadmium	23.9	06	µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Chromium	26.9		µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Lead	2610	09	µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Selenium	2.08	05	µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Silver	0.51	06, 05	µg/L	12,636	SW 846 6020
Field Dissolved Oxygen	Field Dissolved Oxygen	4.42		mg/L		SM 4500-O-G
Field pH	Field pH	8.26		pH Units		EPA 150.1
Field Specific Conductivity	Field Specific Conductivity	794 uS/cm				SM 2510
Field Temperature	Field Temperature	19.5 C				EPA 170.1
Oil And Grease	Oil And Grease	<2	ND	mg/L	12,653	1664

**Sample:** AB59475



**Customer #:** 1106419

**Facility ID:**  
**County:** Jefferson

**Site:** Shapiro Brothers  
**Sample Reference ID:**

**Collector:** SEAN COUNIHAN

**Affiliation:** ESP

**Collect Date:** 9/14/2011 12:10:00PM

**Entry Point:**

**Sample Comment:** Grab sample #1106419, collected from sediment pile that is removed from Wash Station. Has not been previously classified by facility - is a new system and new waste.

est	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic	11000	06	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Barium	504000		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Cadmium	18600		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Chromium	63900		µg/kg	12,631	SW 846 6010B

Sample: **AB59475**  
  
 Customer #: 1106419

Facility ID: \_\_\_\_\_ Site: Shapiro Brothers  
 County: Jefferson Sample Reference ID: \_\_\_\_\_  
 Collector: SEAN COUNIHAN Affiliation: ESP Collect Date: 9/14/2011 12:10:00PM  
 Entry Point: \_\_\_\_\_  
 Sample Comment: Grab sample #1106419, collected from sediment pile that is removed from Wash Station. Has not been previously classified by facility - is a new system and new waste.

Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Lead		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	09	µg/kg	12,631	SW 846 6010B
Percent Moisture	Percent Moisture		%	12,557	Infrared Drying

Sample: **AB59476**  
  
 Customer #: 1106420

Facility ID: \_\_\_\_\_ Site: Shapiro Brothers  
 County: Jefferson Sample Reference ID: \_\_\_\_\_  
 Collector: SEAN COUNIHAN Affiliation: ESP Collect Date: 9/14/2011 12:23:00PM  
 Entry Point: \_\_\_\_\_  
 Sample Comment: Grab sample #1106420 collected from Storm Water outfall on southeast end of property near 9th and railroad crossing.

Parameter	Result	Qualifier	Units	QC Batch ID	Method
20 Metals-Total Recoverable	Arsenic		µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Barium	09	µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Cadmium		µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Chromium		µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Lead	09	µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Selenium	05	µg/L	12,636	SW 846 6020
20 Metals-Total Recoverable	Silver	05	µg/L	12,636	SW 846 6020
Field Dissolved Oxygen	Field Dissolved Oxygen		mg/L		SM 4500-O-G
Field pH	Field pH		pH Units		EPA 150.1
Field Specific Conductivity	Field Specific Conductivity		µS/cm		SM 2510
Field Temperature	Field Temperature		°C		EPA 170.1
Oil And Grease	Oil And Grease	ND	mg/L	12,653	1664

Sample: **AB59477**  
  
 Customer #: 1106421

Facility ID: \_\_\_\_\_ Site: Shapiro Brothers  
 County: Jefferson Sample Reference ID: \_\_\_\_\_  
 Collector: SEAN COUNIHAN Affiliation: ESP Collect Date: 9/14/2011 12:34:00PM  
 Entry Point: \_\_\_\_\_  
 Sample Comment: Grab sample #1106421 collected from roadway north of truck wash entrance just north of non-ferrous building.

Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic		µg/kg	12,631	SW 846 6010B

Sample: AB59477



Customer #: 1106421

Facility ID:  
County: Jefferson  
Collector: SEAN COUNIHAN  
Entry Point:

Site: Shapiro Brothers  
Sample Reference ID:

Affiliation: ESP

Collect Date: 9/14/2011 12:34:00PM

Sample Comment: Grab sample #1106421 collected from roadway north of truck wash entrance just north of non-ferrous building.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Barium	420000		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Cadmium	19200		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Chromium	67300		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Lead	2180000		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	872		µg/kg	12,631	SW 846 6010B
Percent Moisture	Percent Moisture	14.9		%	12,557	Infrared Drying

Sample: AB59478



Customer #: 1106422

Facility ID:  
County: Jefferson  
Collector: SEAN COUNIHAN  
Entry Point:

Site: Shapiro Brothers  
Sample Reference ID:

Affiliation: ESP

Collect Date: 9/14/2011 12:50:00PM

Sample Comment: Grab sample #1106422 collected from first staging pile from entrance northwest side of pile near base.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic	18700		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Barium	697000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Cadmium	44800		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Chromium	204000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Lead	5860000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	6830	09	µg/kg	12,631	SW 846 6010B
Percent Moisture	Percent Moisture	14.7		%	12,557	Infrared Drying

Sample: AB59479



Customer #: 1106423

Facility ID:  
County: Jefferson  
Collector: SEAN COUNIHAN  
Entry Point:

Site: Shapiro Brothers  
Sample Reference ID:

Affiliation: ESP

Collect Date: 9/14/2011 12:47:00PM

Sample Comment: Grab sample #1106423 collected from midway through main roadway between two main staging piles.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic	8480		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Barium	437000	09	µg/kg	12,631	SW 846 6010B

Sample: AB59479  
Customer #: 1106423

Facility ID:  
County: Jefferson  
Collector: SEAN COUNIHAN  
Entry Point:  
Sample Comment:

Site: Shapiro Brothers  
Sample Reference ID:  
Affiliation: ESP  
Collect Date: 9/14/2011 12:47:00PM

Grab sample #1106423 collected from midway through main roadway between two main staging piles.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Cadmium	18500		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Chromium	49100	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Lead	2210000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	5780		µg/kg	12,631	SW 846 6010B
Percent Moisture	Percent Moisture	26.7		%	12,557	Infrared Drying

Sample: AB59480  
Customer #: 1106424

Facility ID:  
County: Jefferson  
Collector: SEAN COUNIHAN  
Entry Point:  
Sample Comment:

Site: Shapiro Brothers  
Sample Reference ID:  
Affiliation: ESP  
Collect Date: 9/14/2011 1:03:00PM

Grab sample #1106424 collected from north end of main roadway near Vine Street entrance.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic	8360		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Barium	367000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Cadmium	16000		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Chromium	72400	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Lead	1590000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	1730		µg/kg	12,631	SW 846 6010B
Percent Moisture	Percent Moisture	19.3		%	12,557	Infrared Drying

Sample: AB59481  
Customer #: 1106425

Facility ID:  
County: Jefferson  
Collector: SEAN COUNIHAN  
Entry Point:  
Sample Comment:

Site: Shapiro Brothers  
Sample Reference ID:  
Affiliation: ESP  
Collect Date: 9/14/2011 1:09:00PM

Grab sample #1106425 collected from bottom of fluff pile.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic	30300	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Barium	2180000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Cadmium	74500		µg/kg	12,631	SW 846 6010B

Sample: AB59481



Customer #: 1106425

Facility ID:  
County: Jefferson

Site: Shapiro Brothers  
Sample Reference ID:

Collector: SEAN COUNIHAN

Affiliation: ESP

Collect Date: 9/14/2011 1:09:00PM

Entry Point:

Sample Comment: Grab sample #1106425 collected from bottom of fluff pile.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Chromium	427000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Lead	4420000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	2520	09	µg/kg	12,631	SW 846 6010B
Percent Moisture	Percent Moisture	19.8		%	12,557	Infrared Drying

Sample: AB59482



Customer #: 1106426

Facility ID:  
County: Jefferson

Site: Shapiro Brothers  
Sample Reference ID:

Collector: SEAN COUNIHAN

Affiliation: ESP

Collect Date: 9/14/2011 1:17:00PM

Entry Point:

Sample Comment: Grab sample #1106426 collected from Vine Street storm water outfall north end of property.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
120 Metals-Total Recoverable	Arsenic	0.96	05	µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Barium	46.3		µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Cadmium	0.54		µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Chromium	1.94		µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Lead	28.0		µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Selenium	<0.50	ND	µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Silver	<0.50	ND	µg/L	12,636	SW 846 6020
Field Dissolved Oxygen	Field Dissolved Oxygen	4.97		mg/L		SM 4500-O-G
Field pH	Field pH	7.78		pH Units		EPA 150.1
Field Specific Conductivity	Field Specific Conductivity	200 uS/cm				SM 2510
Field Temperature	Field Temperature	19.6 C				EPA 170.1
Oil And Grease	Oil And Grease	<2	ND	mg/L	12,653	1664

*Chris Boldt*

**Chris Boldt, Laboratory Manager  
Environmental Services Program  
Division of Environmental Quality**

**Qualifier Descriptions**

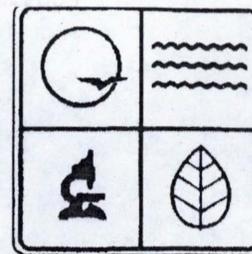
- |  |   |
|--|---|
| 01 Improper collection method                            | 02 Improper preservation                            |
| 03 Exceeded holding time                                 | 04 Analyzed by Contract Laboratory                  |
| 05 Estimated value, detected below PQL                   | 06 Estimated value, QC data outside limits          |
| 07 Estimated value, analyte outside calibration range    | 08 Analyte present in blank at > 1/2 reported value |
| 09 Sample was diluted during analysis                    | 10 Laboratory error                                 |
| 11 Estimated value, matrix interference                  | 12 Insufficient quantity                            |
| 13 Estimated value, true result is >= reported value     | 14 Estimated value, non-homogeneous sample          |
| 15 No Result - Failed Quality Controls Requirements      | 16 Not analyzed - related analyte not detected      |
| 17 Results in dry weight                                 | 18 Sample pH is outside the acceptable range        |
| 19 Estimated value                                       | 20 Not analyzed - Instrument failure                |
| 21 No result - spectral interference                     | 22 pH was performed at the Laboratory               |
| 23 Contract Lab specific qualifier - see sample comments | 24 No result - matrix interference                  |
| 25 No Result: Excessive Chlorination                     | 26 No Result: Excessive Dechlorination              |
| ND Not detected at reported value                        |   |



Addendum

Missouri Department of Natural Resources
Environmental Services Program

Addendum



Reason: TCLP added per memo from project manager

Order ID 110915002 Program, Contact: HWP Dennis Hanson
Report Date: 10/03/2011 LDPR/JobCode: FERCA / NJ12SHAP



Sample: AB59474
Customer #: 1106418

Facility ID: Site: Shapiro Brothers
County: Jefferson Sample Reference ID:
Collector: SEAN COUNIHAN Affiliation: ESP Collect Date: 9/14/2011 12:05:00PM
Entry Point:
Sample Comment: Grab sample #1106418, collected from Wash Station.

Table with 7 columns: Test, Parameter, Result, Qualifier, Units, QC Batch ID, Method. Rows include various metal recoverables (Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver) and other parameters (Dissolved Oxygen, pH, Specific Conductivity, Temperature, Oil And Grease).

Sample: AB59475
Customer #: 1106419

Facility ID: Site: Shapiro Brothers
County: Jefferson Sample Reference ID:
Collector: SEAN COUNIHAN Affiliation: ESP Collect Date: 9/14/2011 12:10:00PM
Entry Point:
Sample Comment: Grab sample #1106419, collected from sediment pile that is removed from Wash Station. Has not been previously classified by facility - is a new system and new waste.

Table with 7 columns: Test, Parameter, Result, Qualifier, Units, QC Batch ID, Method. Rows include 010B Metals-Totals (Arsenic, Barium, Cadmium, Chromium).

Sample: AB59475



Customer #: 1106419

Facility ID:  
County: Jefferson

Site: Shapiro Brothers  
Sample Reference ID:

Collector: SEAN COUNIHAN

Affiliation: ESP

Collect Date: 9/14/2011 12:10:00PM

Entry Point:

Sample Comment: Grab sample #1106419, collected from sediment pile that is removed from Wash Station. Has not been previously classified by facility - is a new system and new waste.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
010B Metals-Total Recoverable	Lead	2220000		µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Silver	7110	09	µg/kg	12,631	SW 846 6010B
010B TCLP	Cadmium	0.19		ppm	13,267	SW 846 6010B
010B TCLP	Lead	6.04		ppm	13,267	SW 846 6010B
Percent Moisture	Percent Moisture	20.2		%	12,557	Infrared Drying

Sample: AB59476



Customer #: 1106420

Facility ID:  
County: Jefferson

Site: Shapiro Brothers  
Sample Reference ID:

Collector: SEAN COUNIHAN

Affiliation: ESP

Collect Date: 9/14/2011 12:23:00PM

Entry Point:

Sample Comment: Grab sample #1106420 collected from Storm Water outfall on southeast end of property near 9th and railroad crossing.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
3020 Metals-Total Recoverable	Arsenic	8.65		µg/L	12,636	SW 846 6020
3020 Metals-Total Recoverable	Barium	323	09	µg/L	12,636	SW 846 6020
3020 Metals-Total Recoverable	Cadmium	30.9		µg/L	12,636	SW 846 6020
3020 Metals-Total Recoverable	Chromium	22.2		µg/L	12,636	SW 846 6020
3020 Metals-Total Recoverable	Lead	2110	09	µg/L	12,636	SW 846 6020
3020 Metals-Total Recoverable	Selenium	2.14	05	µg/L	12,636	SW 846 6020
3020 Metals-Total Recoverable	Silver	0.56	05	µg/L	12,636	SW 846 6020
Field Dissolved Oxygen	Field Dissolved Oxygen	5.10		mg/L		SM 4500-O-G
Field pH	Field pH	7.99		pH Units		EPA 150.1
Field Specific Conductivity	Field Specific Conductivity	1023 uS/cm				SM 2510
Field Temperature	Field Temperature	19.4 C				EPA 170.1
Oil And Grease	Oil And Grease	<2	ND	mg/L	12,653	1664

Sample: AB59477  
  
 Customer #: 1106421

Facility ID:  
 County: Jefferson  
 Collector: SEAN COUNIHAN  
 Entry Point:  
 Sample Comment: Grab sample #1106421 collected from roadway north of truck wash entrance just north of non-ferrous building.

Site: Shapiro Brothers  
 Sample Reference ID:  
 Affiliation: ESP  
 Collect Date: 9/14/2011 12:34:00PM

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic	8640		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Barium	420000		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Cadmium	19200		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Chromium	67300		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Lead	2180000		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	872		µg/kg	12,631	SW 846 6010B
10B TCLP	Cadmium	0.32		ppm	13,267	SW 846 6010B
10B TCLP	Lead	7.34	06	ppm	13,267	SW 846 6010B
Percent Moisture	Percent Moisture	14.9		%	12,557	Infrared Drying

Sample: AB59478  
  
 Customer #: 1106422

Facility ID:  
 County: Jefferson  
 Collector: SEAN COUNIHAN  
 Entry Point:  
 Sample Comment: Grab sample #1106422 collected from first staging pile from entrance northwest side of pile near base.

Site: Shapiro Brothers  
 Sample Reference ID:  
 Affiliation: ESP  
 Collect Date: 9/14/2011 12:50:00PM

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic	18700		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Barium	697000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Cadmium	44800		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Chromium	204000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Lead	5860000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	6830	09	µg/kg	12,631	SW 846 6010B
10B TCLP	Cadmium	0.66		ppm	13,267	SW 846 6010B
10B TCLP	Chromium	<0.1	ND	ppm	13,267	SW 846 6010B
10B TCLP	Lead	7.92		ppm	13,267	SW 846 6010B
Percent Moisture	Percent Moisture	14.7		%	12,557	Infrared Drying

Sample: AB59479  
Customer #: 1106423

Facility ID:  
County: Jefferson  
Collector: SEAN COUNIHAN  
Entry Point:  
Sample Comment:

Site: Shapiro Brothers  
Sample Reference ID:  
Affiliation: ESP  
Collect Date: 9/14/2011 12:47:00PM

Grab sample #1106423 collected from midway through main roadway between two main staging piles.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
010B Metals-Total Recoverable	Arsenic	8480		µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Barium	437000	09	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Cadmium	18500		µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Chromium	49100	09	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Lead	2210000	09	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Silver	5780		µg/kg	12,631	SW 846 6010B
010B TCLP	Cadmium	0.25		ppm	13,267	SW 846 6010B
010B TCLP	Lead	8.20		ppm	13,267	SW 846 6010B
Percent Moisture	Percent Moisture	26.7		%	12,557	Infrared Drying

Sample: AB59480  
Customer #: 1106424

Facility ID:  
County: Jefferson  
Collector: SEAN COUNIHAN  
Entry Point:  
Sample Comment:

Site: Shapiro Brothers  
Sample Reference ID:  
Affiliation: ESP  
Collect Date: 9/14/2011 1:03:00PM

Grab sample #1106424 collected from north end of main roadway near Vine Street entrance.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
010B Metals-Total Recoverable	Arsenic	8360		µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Barium	367000	09	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Cadmium	16000		µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Chromium	72400	09	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Lead	1590000	09	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
010B Metals-Total Recoverable	Silver	1730		µg/kg	12,631	SW 846 6010B
010B TCLP	Cadmium	0.16		ppm	13,267	SW 846 6010B
010B TCLP	Lead	3.37		ppm	13,267	SW 846 6010B
Percent Moisture	Percent Moisture	19.3		%	12,557	Infrared Drying

Sample: AB59481

Facility ID:  
County: Jefferson

Site: Shapiro Brothers  
Sample Reference ID:

Collector: SEAN COUNIHAN

Affiliation: ESP

Collect Date: 9/14/2011 1:09:00PM

Customer #: 1106425

Entry Point:

Sample Comment: Grab sample #1106425 collected from bottom of fluff pile.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
10B Metals-Total Recoverable	Arsenic	30300	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Barium	2180000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Cadmium	74500		µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Chromium	427000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Lead	4420000	09	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Selenium	<1000	ND	µg/kg	12,631	SW 846 6010B
10B Metals-Total Recoverable	Silver	2520	09	µg/kg	12,631	SW 846 6010B
10B TCLP	Barium	0.86		ppm	13,273	SW 846 6010B
10B TCLP	Cadmium	0.32		ppm	13,273	SW 846 6010B
10B TCLP	Chromium	<0.1	ND	ppm	13,273	SW 846 6010B
10B TCLP	Lead	0.68	06	ppm	13,273	SW 846 6010B
Percent Moisture	Percent Moisture	19.8		%	12,557	Infrared Drying

Sample: AB59482

Facility ID:  
County: Jefferson

Site: Shapiro Brothers  
Sample Reference ID:

Collector: SEAN COUNIHAN

Affiliation: ESP

Collect Date: 9/14/2011 1:17:00PM

Customer #: 1106426

Entry Point:

Sample Comment: Grab sample #1106426 collected from Vine Street storm water outfall north end of property.

Test	Parameter	Result	Qualifier	Units	QC Batch ID	Method
120 Metals-Total Recoverable	Arsenic	0.96	05	µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Barium	46.3		µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Cadmium	0.54		µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Chromium	1.94		µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Lead	28.0		µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Selenium	<0.50	ND	µg/L	12,636	SW 846 6020
120 Metals-Total Recoverable	Silver	<0.50	ND	µg/L	12,636	SW 846 6020
Field Dissolved Oxygen	Field Dissolved Oxygen	4.97		mg/L		SM 4500-O-G
Field pH	Field pH	7.78		pH Units		EPA 150.1
Field Specific Conductivity	Field Specific Conductivity	200 µS/cm				SM 2510
Field Temperature	Field Temperature	19.6 C				EPA 170.1
Oil And Grease	Oil And Grease	<2	ND	mg/L	12,653	1664

*Chris Boldt*

**Chris Boldt, Laboratory Manager  
Environmental Services Program  
Division of Environmental Quality**

**Qualifier Descriptions**

- |  |   |
|--|---|
| 01 Improper collection method                            | 02 Improper preservation                            |
| 03 Exceeded holding time                                 | 04 Analyzed by Contract Laboratory                  |
| 05 Estimated value, detected below PQL                   | 06 Estimated value, QC data outside limits          |
| 07 Estimated value, analyte outside calibration range    | 08 Analyte present in blank at > 1/2 reported value |
| 09 Sample was diluted during analysis                    | 10 Laboratory error                                 |
| 11 Estimated value, matrix interference                  | 12 Insufficient quantity                            |
| 13 Estimated value, true result is >= reported value     | 14 Estimated value, non-homogeneous sample          |
| 15 No Result - Failed Quality Controls Requirements      | 16 Not analyzed - related analyte not detected      |
| 17 Results in dry weight                                 | 18 Sample pH is outside the acceptable range        |
| 19 Estimated value                                       | 20 Not analyzed - Instrument failure                |
| 21 No result - spectral interference                     | 22 pH was performed at the Laboratory               |
| 23 Contract Lab specific qualifier - see sample comments | 24 No result - matrix interference                  |
| 25 No Result: Excessive Chlorination                     | 26 No Result: Excessive Dechlorination              |
| ND Not detected at reported value                        |   |

**Appendix B**

**Shapiro Brothers, Inc. Scrap Yard Site  
Chain of Custody Records**

Handwritten signature or initials in the bottom right corner.



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FIELD SHEET AND CHAIN-OF-CUSTODY RECORD



Tape sealed and initialed

Shipped

Hand Delivered

Description of Delivery

Total No. Of Containers: 8

Carrier: \_\_\_\_\_

By: \_\_\_\_\_

Collector's Name: Sean Counihan  
(Please Print)  
Affiliation: KCRO NERO SERO SLRO SWRO WPP DGLS HWP EST MoDOT  
(circle one)  
MDC DHSS Other:

**LAB USE ONLY!**

Laboratory ID: 110915002 Location: B37

Sample Number	Sample Collected	Analyses Requested	Disinfect. Type	Field Parameters (include units)	Matrix (circle one)	Container Type	Preservative Type	Number of Containers
1106418 (Sample A)	Date: 9/14/11	Metals (As, Ba, Cd, Cr, Pb, Se, Ag)	(circle one) <u>None</u>	D.O. Flow pH 8.24 Cond. 794.45 Temp. 19.5°C Other: <u>DG</u> 4.42	<u>Water</u>	1L AG 250 CN	H <sub>2</sub> SO <sub>4</sub> HNO <sub>3</sub>	2 1
For Lab Use Only AB59474	Time: 1205	Oil + Grease TCLP if applicable EA	Cl <sub>2</sub> UV Ozone Other:		Soil Organic Sludge Other:			
1106419 (Sample B)	Date: 9/14/11	Metals (As, Ba, Cd, Cr, Pb, Se, Ag)	(circle one) <u>None</u>	D.O. Flow pH Cond. Temp. Other:	Water <u>Soil</u>	8oz CG	4L	1
For Lab Use Only AB59475	Time: 1210	TCLP if applicable EA	Cl <sub>2</sub> UV Ozone Other:		Organic Sludge Other:			
1106420 (Sample C)	Date: 9/14/11	Metals (As, Ba, Cd, Cr, Pb, Se, Ag)	(circle one) <u>None</u>	D.O. Flow pH 7.99 Cond. 1023 Temp. 19.4°C Other: <u>DG</u> 5.10	<u>Water</u>	1L AG 250 CN	H <sub>2</sub> SO <sub>4</sub> HNO <sub>3</sub>	2 1
For Lab Use Only AB59476	Time: 1223	Oil + Grease TCLP if applicable EA	Cl <sub>2</sub> UV Ozone Other:		Soil Organic Sludge Other:			
1106421 (Sample D)	Date: 9/14/11	Metals (As, Ba, Cd, Cr, Pb, Se, Ag)	(circle one) <u>None</u>	D.O. Flow pH Cond. Temp. Other:	Water <u>Soil</u>	8oz CG	4L	1
For Lab Use Only AB59477	Time: 1234	TCLP if applicable EA	Cl <sub>2</sub> UV Ozone Other:		Organic Sludge Other:			

Relinquished By: [Signature] Received By: [Signature] Date: 9/15/11 Time: 0841  
Relinquished By: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Relinquished By: \_\_\_\_\_ Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FIELD SHEET AND CHAIN-OF-CUSTODY RECORD



<b>Sample A</b>		LDPR: <u>FERCA</u>	Job Code: <u>NJ12 SHAP</u>		Sample Reference ID:		
Facility ID:	Site/Study Name: <u>Shapiro Brothers</u>		County: <u>Jefferson</u>		Sample Event Type: (circle one)		
Sample Comment (where and how the sample was collected): <u>Sample # 1106418 collected from wash station</u>				<input checked="" type="radio"/> <u>Grab</u> <input type="radio"/> Composite <input type="radio"/> Modified <input type="radio"/> Other:		Bypass/SSO Complaint Emergency Response <input checked="" type="radio"/> <u>Inspection</u> Investigation Monitoring Special Project	Sample Type: (circle one) Air    Soil Container    Spill Discharge    Storm Water Groundwater <input checked="" type="radio"/> <u>Surface Water</u> Organic    Wipes Sediment Sludge Drinking Water Supply
GPS Coordinates (UTM Zone 15 NAD83 Only)	X Easting	Y Northing	Accuracy		(circle one)		
					EPE (meters) PDOP		

<b>Sample B</b>		LDPR: <u>FERCA</u>	Job Code: <u>NJ12 SHAP</u>		Sample Reference ID:		
Facility ID:	Site/Study Name: <u>Shapiro Brothers</u>		County: <u>Jefferson</u>		Sample Event Type: (circle one)		
Sample Comment (where and how the sample was collected): <u>Sample # 1106419 collected from sediment pile that is removed from wash station has not been previously classified by facility - is a new system + new waste.</u>				<input checked="" type="radio"/> <u>Grab</u> <input type="radio"/> Composite <input type="radio"/> Modified <input type="radio"/> Other:		Bypass/SSO Complaint Emergency Response <input checked="" type="radio"/> <u>Inspection</u> Investigation Monitoring Special Project	Sample Type: (circle one) Air    Soil Container    Spill Discharge    Storm Water Groundwater <input checked="" type="radio"/> <u>Surface Water</u> Organic    Wipes <u>SMC</u> <input checked="" type="radio"/> <u>Sediment</u> Sludge Drinking Water Supply
GPS Coordinates (UTM Zone 15 NAD83 Only)	X Easting	Y Northing	Accuracy		(circle one)		
					EPE (meters) PDOP		

<b>Sample C</b>		LDPR: <u>FERCA</u>	Job Code: <u>NJ12 SHAP</u>		Sample Reference ID:		
Facility ID:	Site/Study Name: <u>Shapiro Brothers</u>		County: <u>Jefferson</u>		Sample Event Type: (circle one)		
Sample Comment (where and how the sample was collected): <u>Sample # 1106420 collected from storm water outfall on east end of property near 9th + railroad crossing</u>				<input checked="" type="radio"/> <u>Grab</u> <input type="radio"/> Composite <input type="radio"/> Modified <input type="radio"/> Other:		Bypass/SSO Complaint Emergency Response <input checked="" type="radio"/> <u>Inspection</u> Investigation Monitoring Special Project	Sample Type: (circle one) Air    Soil Container    Spill Discharge <input checked="" type="radio"/> <u>Storm Water</u> Groundwater <input checked="" type="radio"/> <u>Surface Water</u> Organic    Wipes Sediment Sludge Drinking Water Supply
GPS Coordinates (UTM Zone 15 NAD83 Only)	X Easting	Y Northing	Accuracy		(circle one)		
					EPE (meters) PDOP		

<b>Sample D</b>		LDPR: <u>FERCA</u>	Job Code: <u>NJ12 SHAP</u>		Sample Reference ID:		
Facility ID:	Site/Study Name: <u>Shapiro Brothers</u>		County: <u>Jefferson</u>		Sample Event Type: (circle one)		
Sample Comment (where and how the sample was collected): <u>Sample # 1106421 collected from roadway north of truck wash entrance just north of non-ferrous building</u>				<input checked="" type="radio"/> <u>Grab</u> <input type="radio"/> Composite <input type="radio"/> Modified <input type="radio"/> Other:		Bypass/SSO Complaint Emergency Response <input checked="" type="radio"/> <u>Inspection</u> Investigation Monitoring Special Project	Sample Type: (circle one) Air <input checked="" type="radio"/> <u>Soil</u> Container    Spill Discharge    Storm Water Groundwater    Surface Water Organic    Wipes Sediment Sludge Drinking Water Supply
GPS Coordinates (UTM Zone 15 NAD83 Only)	X Easting	Y Northing	Accuracy		(circle one)		
					EPE (meters) PDOP		

Remarks:  
5.6°C



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FIELD SHEET AND CHAIN-OF-CUSTODY RECORD



Tape sealed and initialed

Shipped

Hand Delivered

Description of Delivery

Total No. Of Containers: 4

Carrier: \_\_\_\_\_

By: \_\_\_\_\_

Collector's Name:

*Sean Counihan*

(Please Print)

Affiliation: KCRO NERO SERO SLRO SWRO WPP DGLS HWP ESP MoDOT

(circle one) MDC DHSS Other: \_\_\_\_\_

LAB USE ONLY!

Laboratory ID:

*110915002*

Location:

*B37*

Sample Number	Sample Collected	Analyses Requested	Disinfect. Type	Field Parameters (include units)	Matrix (circle one)	Container Type	Preservative Type	Number of Containers
<i>1106422</i> (Sample A)	Date: <i>9/14/11</i>	<i>Metals (As, Ba, Cd, Cr, Pb, Se, Ag)</i>	(circle one) None	D.O. Flow pH Cond.	Water <u>Soil</u> Organic	<i>8oz CG</i>	<i>4L</i>	<i>1</i>
For Lab Use Only <i>AB59478</i>	Time: <i>1250</i>	<i>TCLP if applicable Et</i>	Ozone Other:	Temp. Other:	Sludge Other:			
<i>1106423</i> (Sample B)	Date: <i>9/14/11</i>	<i>Metals (As, Ba, Cd, Cr, Pb, Se, Ag)</i>	(circle one) None	D.O. Flow pH Cond.	Water <u>Soil</u> Organic	<i>8oz CG</i>	<i>4L</i>	<i>1</i>
For Lab Use Only <i>AB59479</i>	Time: <i>1247</i>	<i>TCLP if applicable Et</i>	Ozone Other:	Temp. Other:	Sludge Other:			
<i>1106424</i> (Sample C)	Date: <i>9/14/11</i>	<i>Metals (As, Ba, Cd, Cr, Pb, Se, Ag)</i>	(circle one) None	D.O. Flow pH Cond.	Water <u>Soil</u> Organic	<i>8oz CG</i>	<i>4L</i>	<i>1</i>
For Lab Use Only <i>AB59480</i>	Time: <i>1303</i>	<i>TCLP if applicable Et</i>	Ozone Other:	Temp. Other:	Sludge Other:			
<i>1106425</i> (Sample D)	Date: <i>9/14/11</i>	<i>Metals (As, Ba, Cd, Cr, Pb, Se, Ag)</i>	(circle one) None	D.O. Flow pH Cond.	Water <u>Soil</u> Organic	<i>8oz CG</i>	<i>4L</i>	<i>1</i>
For Lab Use Only <i>AB59481</i>	Time: <i>1309</i>	<i>TCLP if applicable Et</i>	Ozone Other:	Temp. Other:	Sludge Other:			

Relinquished By: <i>Sean Counihan</i>	Received By: <i>Derek [Signature]</i>	Date: <i>9/15/11</i>	Time: <i>0841</i>
Relinquished By: _____	Received By: _____	Date: _____	Time: _____
Relinquished By: _____	Received By: _____	Date: _____	Time: _____



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FIELD SHEET AND CHAIN-OF-CUSTODY RECORD



<b>Sample A</b>		LDPR: FERCA	Job Code: NJ 12 SHAP	Sample Reference ID:	
Facility ID:	Site/Study Name: Shapiro Brothers	County: Jefferson		Sample Event Type: (circle one)	
Sample Comment (where and how the sample was collected): Sample # 1106422 collected from first staging pile from entrance north west side of pile near base.				Sample Type: (circle one)	
GPS Coordinates (UTM Zone 15 NAD83 Only)		X Easting	Y Northing	Accuracy (circle one)	
		EPE (meters)		PDOP	
				<input type="checkbox"/> Bypass/SSO <input type="checkbox"/> Complaint <input type="checkbox"/> Emergency Response <input checked="" type="checkbox"/> Inspection <input type="checkbox"/> Investigation <input type="checkbox"/> Monitoring <input type="checkbox"/> Special Project	<input type="checkbox"/> Air <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Container <input type="checkbox"/> Spill <input type="checkbox"/> Discharge <input type="checkbox"/> Storm Water <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Organic <input type="checkbox"/> Wipes <input type="checkbox"/> Sediment <input type="checkbox"/> Sludge <input type="checkbox"/> Drinking Water Supply

<b>Sample B</b>		LDPR: FERCA	Job Code: NJ 12 SHAP	Sample Reference ID:	
Facility ID:	Site/Study Name: Shapiro Brothers	County: Jefferson		Sample Event Type: (circle one)	
Sample Comment (where and how the sample was collected): Sample # 1106423 collected from midway through main roadway between two main staging piles				Sample Type: (circle one)	
GPS Coordinates (UTM Zone 15 NAD83 Only)		X Easting	Y Northing	Accuracy (circle one)	
		EPE (meters)		PDOP	
				<input type="checkbox"/> Bypass/SSO <input type="checkbox"/> Complaint <input type="checkbox"/> Emergency Response <input checked="" type="checkbox"/> Inspection <input type="checkbox"/> Investigation <input type="checkbox"/> Monitoring <input type="checkbox"/> Special Project	<input type="checkbox"/> Air <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Container <input type="checkbox"/> Spill <input type="checkbox"/> Discharge <input type="checkbox"/> Storm Water <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Organic <input type="checkbox"/> Wipes <input type="checkbox"/> Sediment <input type="checkbox"/> Sludge <input type="checkbox"/> Drinking Water Supply

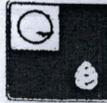
<b>Sample C</b>		LDPR: FERCA	Job Code: NJ 12 SHAP	Sample Reference ID:	
Facility ID:	Site/Study Name: Shapiro Brothers	County: Jefferson		Sample Event Type: (circle one)	
Sample Comment (where and how the sample was collected): Sample # 1106424 collected from north end of main roadway near Vine Street entrance.				Sample Type: (circle one)	
GPS Coordinates (UTM Zone 15 NAD83 Only)		X Easting	Y Northing	Accuracy (circle one)	
		EPE (meters)		PDOP	
				<input type="checkbox"/> Bypass/SSO <input type="checkbox"/> Complaint <input type="checkbox"/> Emergency Response <input checked="" type="checkbox"/> Inspection <input type="checkbox"/> Investigation <input type="checkbox"/> Monitoring <input type="checkbox"/> Special Project	<input type="checkbox"/> Air <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Container <input type="checkbox"/> Spill <input type="checkbox"/> Discharge <input type="checkbox"/> Storm Water <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Organic <input type="checkbox"/> Wipes <input type="checkbox"/> Sediment <input type="checkbox"/> Sludge <input type="checkbox"/> Drinking Water Supply

<b>Sample D</b>		LDPR: FERCA	Job Code: NJ 12 SHAP	Sample Reference ID:	
Facility ID:	Site/Study Name: Shapiro Brothers	County: Jefferson		Sample Event Type: (circle one)	
Sample Comment (where and how the sample was collected): Sample # 1106425 collected from bottom of fluff pile				Sample Type: (circle one)	
GPS Coordinates (UTM Zone 15 NAD83 Only)		X Easting	Y Northing	Accuracy (circle one)	
		EPE (meters)		PDOP	
				<input type="checkbox"/> Bypass/SSO <input type="checkbox"/> Complaint <input type="checkbox"/> Emergency Response <input checked="" type="checkbox"/> Inspection <input type="checkbox"/> Investigation <input type="checkbox"/> Monitoring <input type="checkbox"/> Special Project	<input type="checkbox"/> Air <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Container <input type="checkbox"/> Spill <input type="checkbox"/> Discharge <input type="checkbox"/> Storm Water <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Organic <input type="checkbox"/> Wipes <input type="checkbox"/> Sediment <input type="checkbox"/> Sludge <input type="checkbox"/> Drinking Water Supply

Remarks:  
5.6°C



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FIELD SHEET AND CHAIN-OF-CUSTODY RECORD



4

Description of Delivery

Tape sealed and initialed

Total No. Of Containers: 2

Shipped

Carrier: \_\_\_\_\_

Hand Delivered

By: \_\_\_\_\_

Collector's Name: Sean Carrigan  
(Please Print)  
Affiliation: KCRO NERO SERO SLRO SWRO WPP DGLS HWP ESP MoDOT  
(circle one)  
MDC DHSS Other:

**LAB USE ONLY!**  
Laboratory ID: 110915002  
Location: B37

Sample Number	Sample Collected	Analyses Requested	Disinfect. Type	Field Parameters (include units)	Matrix (circle one)	Container Type	Preservative Type	Number of Containers
<u>1109126</u> (Sample A) For Lab Use Only	Date: <u>9/14/11</u> Time: <u>1317</u>	<u>Metals (As, Ba, Cd, Cr, Pb, Se, Ag)</u> <u>Oil + Grease</u> <u>TCLP &amp; applicable SA</u>	(circle one) <u>None</u> Cl <sub>2</sub> UV Ozone Other:	D.O. Flow pH <u>7.78</u> Cond. <u>200 uS</u> Temp. <u>19.6 °C</u> Other: <u>DO 4.97</u>	<u>Water</u> Soil Organic Sludge Other:	<u>1 LAG</u> <u>250 CN</u>	<u>H<sub>2</sub>SO<sub>4</sub></u> <u>HNO<sub>3</sub></u>	<u>2</u> <u>1</u>
(Sample B) For Lab Use Only	Date: Time:		None Cl <sub>2</sub> UV Ozone Other:	D.O. Flow pH Cond. Temp. Other:	Water Soil Organic Sludge Other:			
(Sample C) For Lab Use Only	Date: Time:		None Cl <sub>2</sub> UV Ozone Other:	D.O. Flow pH Cond. Temp. Other:	Water Soil Organic Sludge Other:			
(Sample D) For Lab Use Only	Date: Time:		None Cl <sub>2</sub> UV Ozone Other:	D.O. Flow pH Cond. Temp. Other:	Water Soil Organic Sludge Other:			

Relinquished By: <u>[Signature]</u>	Received By: <u>[Signature]</u>	Date: <u>9/15/11</u>	Time: <u>0841</u>
Relinquished By:	Received By:	Date:	Time:
Relinquished By:	Received By:	Date:	Time:



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FIELD SHEET AND CHAIN-OF-CUSTODY RECORD



<b>Sample A</b>	LDPR: FERCA	Job Code: NJ 12 SNAP	Sample Reference ID:
Facility ID:	Site/Study Name: Shapiro Brothers	County: Jefferson	Sample Event Type: (circle one) Bypass/SSO Complaint Emergency Response Inspection Investigation Monitoring Special Project
Sample Comment (where and how the sample was collected): Sample # 1106426 collected from Vine Street storm water out fall northend of property			Sample Type: (circle one) Air Soil Container Spill Discharge Storm Water Groundwater Surface Water Organic Wipes Sediment Sludge Drinking Water Supply
GPS Coordinates (UTM Zone 15 NAD83 Only)	X Easting	Y Northing	Accuracy (circle one) EPE (meters) PDOP

<b>Sample B</b>	LDPR:	Job Code:	Sample Reference ID:
Facility ID:	Site/Study Name:	County:	Sample Event Type: (circle one) Bypass/SSO Complaint Emergency Response Inspection Investigation Monitoring Special Project
Sample Comment (where and how the sample was collected): Grab Composite Modified Other:			Sample Type: (circle one) Air Soil Container Spill Discharge Storm Water Groundwater Surface Water Organic Wipes Sediment Sludge Drinking Water Supply
GPS Coordinates (UTM Zone 15 NAD83 Only)	X Easting	Y Northing	Accuracy (circle one) EPE (meters) PDOP

<b>Sample C</b>	LDPR:	Job Code:	Sample Reference ID:
Facility ID:	Site/Study Name:	County:	Sample Event Type: (circle one) Bypass/SSO Complaint Emergency Response Inspection Investigation Monitoring Special Project
Sample Comment (where and how the sample was collected): Grab Composite Modified Other:			Sample Type: (circle one) Air Soil Container Spill Discharge Storm Water Groundwater Surface Water Organic Wipes Sediment Sludge Drinking Water Supply
GPS Coordinates (UTM Zone 15 NAD83 Only)	X Easting	Y Northing	Accuracy (circle one) EPE (meters) PDOP

<b>Sample D</b>	LDPR:	Job Code:	Sample Reference ID:
Facility ID:	Site/Study Name:	County:	Sample Event Type: (circle one) Bypass/SSO Complaint Emergency Response Inspection Investigation Monitoring Special Project
Sample Comment (where and how the sample was collected): Grab Composite Modified Other:			Sample Type: (circle one) Air Soil Container Spill Discharge Storm Water Groundwater Surface Water Organic Wipes Sediment Sludge Drinking Water Supply
GPS Coordinates (UTM Zone 15 NAD83 Only)	X Easting	Y Northing	Accuracy (circle one) EPE (meters) PDOP

Remarks: 5.6°C

## **Appendix C**

### **Shapiro Brothers, Inc. Scrap Yard Site Sampling Locations Map and Photographs**





Sample 1, Surface water from Truck Wash Station.



Sample 2, Soil\Sediment scraped from bottom of wash tank.



Sample 3, Storm water run off, S.E. corner of property.



Sample 4, Soil collected from roadway just after entering property.



Sample 5, Soil collected from bottom of first staging pile.



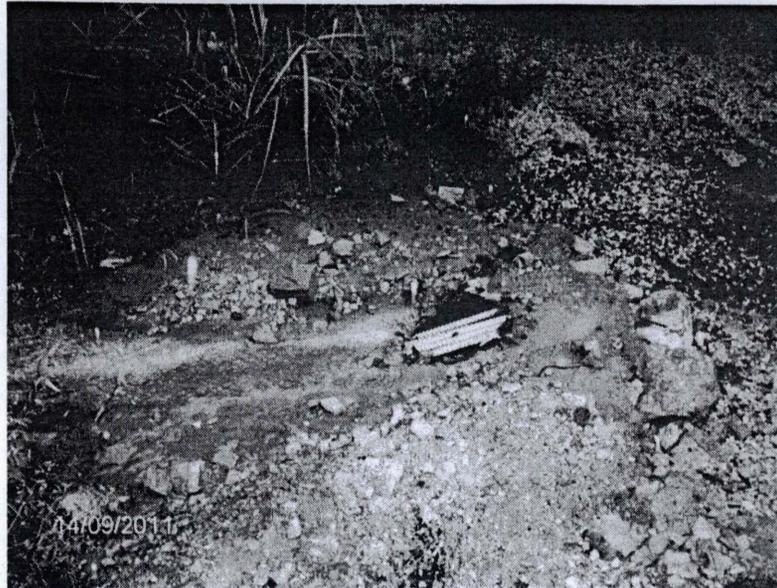
Sample 6, Soil collected from roadway midway through property – between staging piles. (Staging pile 2 in background)



Sample 7, Auto Fluff pile



Sample 8, Soil collected from north entrance.



Sample 9, Storm Water run off from Vine Street (on north end of property). The drain was installed by Shapiro Brothers to route underground to stream.

**Appendix D**

**Shapiro Brothers, Inc. Scrap Yard Site  
Field Notes**

Shapiro Brothers Scrap Yard  
Wed. Sep. 4 2011 FERCA NJ/25/11  
Arrive on site @ 0900 Pin + Delmar  
DPR Personnel RO. Box 759

Sam Corman  
Evan Bryant  
Jim Kessel  
Vickie Heberle  
Darrin Barnat

Also on site

Site Owner <sup>NPN</sup> Greg Shapiro/Dave Shapiro  
Shapiro Environmental ~~Robert~~ Dave ~~Rowe~~ Rowe  
Had try unit on about two to  
get started. <sup>NPN</sup> Torian Gregory  
consultant

Met w/ Greg Shapiro 0945

Greg said Shapiro Brothers has been  
sold & will be closing this Friday Sep 16  
Site is 1.5 acres 8 acres usable

1157 Sample 1

From wash station by front entrance  
at 9th + Delmar

Collecting water from washbasin

GPS N. 38 23001  
-90. 39035

410  
Water quality meters bump tested on 9/10/9  
pH at 7 = 7.06  
pH at 4 = 4.03  
Cond at 1413<sub>65</sub> 1460<sub>65</sub>

Sample collected @ 1205  
Temp = 19.5°C  
pH = 8.26  
DO = 4.42  
Cond = 794  
Sample # 1106418

Sample 2 collected from  
Sediment collected from wash station  
conveyor scraper collects & deposits into  
container outside of station  
Sample # 1106419 @ 12:10  
5 aliquots from container

Sample 3 from stormwater outfall  
near creek on 4th street  
railroad crossing

Temp P = 17.4°C  
Cond = 1022  
pH = 7.91  
DO = 5.16

Sample 1 collected @ 1223  
Sample # 1106420

Sample 4 Soil  
collected from Center of landing  
after truck waste station  
east of Non-ferrous building  
north  
Sample collected @ 1234  
5 aliquots from ~~east~~ <sup>west</sup> ~~center~~ <sup>center</sup> to north  
Sample # 1106421

Sample 5 Soil collected from  
1st string pile from main entrance  
at base of pile ~~west~~ <sup>west</sup> side. 5 aliquots  
Sample collected at 1250  
Sample # 1106422

Sample 6 soil collected from  
middle of roadway between piles  
Sample collected at 1247  
Sample # 1106423

Sample 7 Collected Soil  
from ~~left~~ entrance off Vine St.  
sample collected at 1303  
sample # 110624

Sample 8 Collected from  
Fluff pile (left over from car shredding)  
collected @ 1309  
Sample # 110625

Sample 9 north of property  
Storm water outfall from Vine  
St. This outfall should not be impacted  
by Shapiro's facility. water is underground  
except for corner of facility near  
Fluff pile entrance where Shapiro's  
re-routed runoff back underground  
so as not to affect fluff pile

Temp 19.6°C  
Cond 240 µS  
pH 7.78  
TDS 497

Sample collected at 1317  
sample # 110626

# Notification And Waste Stream Information

Epa ID MOR000021907 Missouri ID 036446 State Status Administrative Number

Date EPA Id Issued 06/03/2003

Notification Update Received: 06/03/2003

Record Add/Changed: 04/15/2010

Company Name SHAPIRO BROTHERS INC

Facility Address 9TH & DELMAR

FESTUS, MO 63028

County JEFFERSON

EASTING: 728211.875

NORTHING: 4225504.255

Latitude Decimal Format

Longitude Decimal Format

Method Of Collection Z1

Collection Site

Mailing Address 9TH & DELMAR

FESTUS, MO 63028

Contact Person/Position GREGORY E SHAPIRO

Phone Number (636) 937-9185

Facility Owner

Facility's Owner Address

Owner's Phone Number

Owner Type

Property Owner's Name

Property Owner's Address

Property Owner's Phone Number

Property Owner Type

TSD Facility TSD Identification Number:

RCRA Identification Number:

Generator/Facility Information is Confidential

Large Quantity Handler Of Universal Waste

Registered EPA Hazardous Waste Numbers