



MEMORANDUM

Missouri Department of Transportation Construction and Materials Central Laboratory

TO: Andrew Ellsworth-SW/rw

COPY:

FROM: Frank Reichart 
Environmental Chemist

DATE: November 18, 2011

SUBJECT: Materials
Asbestos Inspection & Heavy Metal Paint Survey
Route B
Job No. N/A
Parcel SW-0003(Urich MT Lot)
Henry County

We are providing you with the results of the requested inspection on the above referenced property. The inspection report contains an asbestos and a heavy metals survey, unless otherwise requested. The asbestos inspection included sample collection of suspect asbestos-containing material and National Voluntary Laboratory Accreditation Program (NVLAP) accredited testing to confirm the presence of asbestos. This asbestos and heavy metal paint report includes four different report forms. Form T746 lists all of the samples taken during the asbestos inspection. Form T747 shows only those samples that tested positive for Category I nonfriable asbestos-containing materials that may remain in the structure during demolition, if kept adequately wet to avoid visible air emissions. Form T748 shows only those samples that tested positive for asbestos and require removal prior to demolition. Form C760 lists all paint samples taken during the heavy metal paint survey and their metal content.

In accordance with the National Emissions Standard for Hazardous Air Pollutants (NESHAP), as well as city and county asbestos abatement regulations - Registration, Notification, and Performance Requirements, regulated asbestos-containing material (RACM) namely, Friable and Category II nonfriable, have a high probability of becoming friable under normal demolition forces. Practices and procedures for removal prior to demolition, disposal, and clearances should be in accordance with referenced regulations. Missouri Department of Transportation policy is to perform asbestos abatements in accordance with NESHAP.

In accordance with Missouri Department of Natural Resources' Technical Bulletin "Managing Construction and Demolition Waste" dated January 31, 2003, a heavy metal paint survey has been performed on the above referenced property. We are providing you with the results of this survey. This survey includes locating painted concrete, block and/or brick surfaces, sampling/testing the painted surface(s) to determine if hazardous heavy metals are present. Non-hazardous painted concrete, blocks, or bricks may be used as clean fill materials, if properly

TO: Ellsworth-SW/rw

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handled. You must contact the Central Office Design Division for proper handling of the reported painted surfaces.

Although our survey included observing and sampling behind walls, above ceilings, beneath floors, etc., it is possible that potentially hidden asbestos-containing materials may exist within the structure. To our knowledge, we have located all suspect asbestos-containing and all painted concrete, block and brick surfaces. If suspect asbestos-containing materials or if painted concrete, block and/or brick surfaces are observed in addition to those reflected in this inspection report, then please advise us immediately so that we may schedule a follow-up inspection.

Should you have any questions regarding these reports, please contact me at (573) 526-4359.

db/dr

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Attachments

**MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Asbestos Survey Report
All Suspect ACM**

ROUTE: B
MODOT JOB NO.: N/A
DISTRICT: SW
COUNTY: Henry
DATE OF SURVEY: November 2, 2011
PARCEL NO.: SW-0003 (Urich MT Lot)
SITE ADDRESS: 726 NW 1271 Road, Urich 64788
 (East Side, 0.2 mile North of Rt 7)

SURVEYED BY: Frank Reichart and Diane Roegge
CERTIFICATION #: 711201041IMODR11239, F.R. 711201041IMODR7165, D.R.
TYPE(S) OF STRUCTURE(S): 5-Bay Metal-Clad Metal-Frame Maintenance Shed with Brick Office Addition on Concrete, Metal Box Trailer, Metal Spreader Equipment Racks, 3-Bay Concrete/Wood-Frame Salt Shed, Brine Tank in Concrete Basin, Metal Tank Saddles & Supports on Concrete, Metal Hoist/Tailgate Racks, Wooden TC Rack, Metal-Rail Tire Bin, Metal Loading Rack/Steps, Metal-Rail Loading Ramp, Metal Culvert Pipe Rack, Concrete Jersey Rail Loose Mix Bin, Metal-Clad Flammable Shed, and Concrete Fuel Tank Basin

Sample ID	Type of Materials	Location of Material	Friability Category	Field Measure
	Maintenance Shed			
11MFJR A24	Asphalt Roofing Shingles	Interior Parapet Wall, and Loose, Loft Above Breakroom	N-ACM	
11MFJR A25	Asphalt Joint Compound	Roof, Over Office Addition, Around Vents and Seams	N-ACM	
11MFJR A26	Floor Tile (12"x 12")	Office, Over Concrete; and Loose, Bathroom Closet	NAFD	
11MFJR A27	Adhesive, Floor Tile (12"x 12")	Office, Over Concrete; and Loose, Bathroom Closet	N-ACM	
11MFJR A28	Floor Tile (12"x 12")	Locker Room, Over Concrete	NAFD	
11MFJR A29	Adhesive, Floor Tile (12"x 12")	Locker Room, Over Concrete	N-ACM	
11MFJR A30	Floor Tile (12"x 12")	Bathroom, Over Concrete; and Loose, Bathroom Closet	NAFD	
11MFJR A31	Adhesive, Floor Tile (12"x 12")	Bathroom, Over Concrete; and Loose, Bathroom Closet	N-ACM	
11MFJR A32	Floor Tile (12"x 12")	Breakroom, Over Concrete	NAFD	
11MFJR A33	Adhesive, Floor Tile (12"x 12")	Breakroom, Over Concrete	N-ACM	
11MFJR A34	Ceiling Tile (2'x 4')	Office, Locker Room, and Bathroom	N-ACM	
11MFJR A35	Surfacing Material	Walls and Ceiling, Breakroom	N-ACM	
11MFJR A36	Surfacing Material	Walls and Ceiling, Northeast Office	N-ACM	
11MFJR A37	Sheetrock, Joint/Tape/Mud	Walls and Ceiling, Breakroom	N-ACM	
11MFJR A38	Sheetrock, Joint/Tape/Mud	Walls and Ceiling, Northeast Office	N-ACM	
11MFJR A39	Sheetrock (No Mud/Tape)	Walls, Bathroom and Closet, Bathroom	N-ACM	
11MFJR A40	Insulation	Flexible Ductwork, Loft Above Breakroom	N-ACM	
11MFJR A41	Insulation	Interior Walls, Exterior Office Addition Walls, and Above Ceiling Tile	N-ACM	

N-ACM = Non-Asbestos Containing Material INF = Category I Nonfriable II NF = Category II Nonfriable F = Friable
 NAFD = No Asbestos Fiber Detected * = Tested By Point Count Procedure J:BARRED\ASBESTOS\DISTRICT - SW (SOUTHWEST)\MISC\SW-0003 URICH MT LOT.DOCX

MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Asbestos Survey Report
All Suspect ACM

ROUTE: B
 MODOT JOB NO.: N/A
 DISTRICT: SW
 COUNTY: Henry
 DATE OF SURVEY: November 2, 2011
 PARCEL NO.: SW-0003 (Urch MT Lot)
 SITE ADDRESS: 726 NW 1271 Road, Urch 64788
 (East Side, 0.2 mile North of Rt 7)

SURVEYED BY: Frank Reichart and Diane Roegge
 CERTIFICATION #: 7112010411MOIR11239, F.R. 7112010411MOIR7165, D.R.
 TYPE(S) OF STRUCTURE(S): 5-Bay Metal-Clad Metal-Frame Maintenance Shed with Brick
 Office Addition on Concrete, Metal Box Trailer, Metal Spreader
 Equipment Racks, 3-Bay Concrete/Wood-Frame Salt Shed, Brine
 Tank in Concrete Basin, Metal Tank Saddles & Supports on Con-
 crete, Metal Hoist/Tailgate Racks, Wooden TC Rack, Metal-Rail
 Tire Bin, Metal Loading Rack/Steps, Metal-Rail Loading Ramp,
 Metal Culvert Pipe Rack, Concrete Jersey Rail Loose Mix Bin,
 Metal-Clad Flammable Shed, and Concrete Fuel Tank Basin

Sample ID	Type of Materials	Location of Material	Friability Category	Field Measure
	Maintenance Shed (Continued)			
11MFJR A42	Insulation	Above Ceiling Tile, Bathroom and Closet, Bathroom	N-ACCM	
11MFJR A43	Insulation	Exterior Walls and Along Roofline	N-ACCM	
	Metal Box Trailer			
11MFJR A44	Ceiling Tile (2'x 4')	2-Boxes, Loose	N-ACCM	
11MFJR A45	Sheetrock (No Mud/Tape)	Loose	N-ACCM	
11MFJR A46	Insulation	Loose, Batts	N-ACCM	
11MFJR A47	Insulation	Loose	N-ACCM	
	Spreader Equipment Racks			
	No samples taken.	No suspect ACM located.		
	Salt Shed			
	No samples taken.	No suspect ACM located.		
	Brine Tank & Basin			
	No samples taken.	No suspect ACM located.		
	Tank Saddles/Support/Footers			
	No samples taken.	No suspect ACM located.		
	Hoist/Tailgate Racks			
	No samples taken.	No suspect ACM located.		
	Traffic Control Storage Rack			
	No samples taken.	No suspect ACM located.		

N-ACM = Non-Asbestos Containing Material
 NAFD = No Asbestos Fiber Detected

I NF = Category I Nonfriable
 II NF = Category II Nonfriable

F = Friable
 J:BARRED\ASBESTOS\DISTRICT - SW (SOUTHWEST)\MISC\SW-0003 URICH MT LOT.DOCX

MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Asbestos Survey Report
All Suspect ACM

ROUTE: B
 MODOT JOB NO.: N/A
 DISTRICT: SW
 COUNTY: Henry
 DATE OF SURVEY: November 2, 2011
 PARCEL NO.: SW-0003 (Urlich MT Lot)
 SITE ADDRESS: 726 NW 1271 Road, Urlich 64788
 (East Side, 0.2 mile North of Rt 7)

SURVEYED BY: Frank Reichart and Diane Roegge
 CERTIFICATION #: 7112010411MOIR11239, F.R. 7112010411MOIR7165, D.R.
 TYPE(S) OF STRUCTURE(S): 5-Bay Metal-Clad Metal-Frame Maintenance Shed with Brick
 Office Addition on Concrete, Metal Box Trailer, Metal Spreader
 Equipment Racks, 3-Bay Concrete/Wood-Frame Salt Shed, Brine
 Tank in Concrete Basin, Metal Tank Saddles & Supports on Con-
 crete, Metal Hoist/Tailgate Racks, Wooden TC Rack, Metal-Rail
 Tire Bin, Metal Loading Rack/Steps, Metal-Rail Loading Ramp,
 Metal Culvert Pipe Rack, Concrete Jersey Rail Loose Mix Bin,
 Metal-Clad Flammable Shed, and Concrete Fuel Tank Basin

Sample ID	Type of Materials	Location of Material	Friability Category	Field Measure
	Tire Bin	No samples taken. No suspect ACM located.		
	Loading Rack/Steps	No samples taken. No suspect ACM located.		
	Loading Ramp	No samples taken. No suspect ACM located.		
	Culvert Pipe Storage Rack	No samples taken. No suspect ACM located.		
	Loose Mix Bin	No samples taken. No suspect ACM located.		
	Flammable Shed	No samples taken. No suspect ACM located.		
	Fuel Tank Basin	No samples taken. No suspect ACM located.		

NOTE: Non-destructive means were used to survey and sample this property. Additional suspect material may be present hidden underneath vinyl/metal siding, metal roofing, interior walls and/or ceilings.

**MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS**
Asbestos Survey Report
Nonfriable Asbestos-Containing Materials
(Abatement not required if not made friable during demolition.)

ROUTE: B
MODOT JOB NO.: N/A
DISTRICT: SW
COUNTY: Henry
DATE OF TESTS: November 16-17, 2011
PARCEL NO.: SW-0003 (Urich MT Lot)
SITE ADDRESS: 726 NW 1271 Road, Urich 64788
 (East Side, 0.2 mile North of Rt 7)

TESTED BY: Frank Reichart
CERTIFICATION #: 7112010411MOIR11239
TYPE(S) OF STRUCTURE(S): 5-Bay Metal-Clad Metal-Frame Maintenance Shed with Brick Office Addition on Concrete, Metal Box Trailer, Metal Spreader Equipment Racks, 3-Bay Concrete/Wood-Frame Salt Shed, Brine Tank in Concrete Basin, Metal Tank Saddles & Supports on Concrete, Metal Hoist/Tailgate Racks, Wooden TC Rack, Metal-Rail Tire Bin, Metal Loading Rack/Steps, Metal-Rail Loading Ramp, Metal Culvert Pipe Rack, Concrete Jersey Rail Loose Mix Bin, Metal-Clad Flammable Shed, and Concrete Fuel Tank Basin

Sample ID	Type of Material	Location of Material	Friability Category	Field Measure	Asbestos Type	Percent
	Maintenance Shed	None Located	INF			
	Metal Box Trailer	None Located	INF			
	Spreader Equipment Racks	None Located	INF			
	Salt Shed	None Located	INF			
	Brine Tank & Basin	None Located	INF			
	Tank Saddles/Support/Footers	None Located	INF			
	Hoist/Tailgate Racks	None Located	INF			
	Traffic Control Storage Rack	None Located	INF			
	Tire Bin	None Located	INF			

All necessary work to handle this material is the contractor's responsibility.

INF = Category I Nonfriable

MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS

Asbestos Survey Report
All materials requiring removal or special handling.

ROUTE: B
 MODOT JOB NO.: N/A
 DISTRICT: SW
 COUNTY: Henry
 DATE OF TESTS: November 16-17, 2011
 PARCEL NO.: SW-0003 (Urich MT Lot)
 SITE ADDRESS: 726 NW 1271 Road, Urich 64788
 (East Side, 0.2 mile North of Rt 7)

TESTED BY: Frank Reichart
 CERTIFICATION #: 7112010411MOIR11239
 TYPE(S) OF STRUCTURE(S): 5-Bay Metal-Clad Metal-Frame Maintenance Shed with Brick Office Addition on Concrete, Metal Box Trailer, Metal Spreader Equipment Racks, 3-Bay Concrete/Wood-Frame Salt Shed, Brine Tank in Concrete Basin, Metal Tank Saddles & Supports on Concrete, Metal Hoist/Tailgate Racks, Wooden TC Rack, Metal-Rail Tire Bin, Metal Loading Rack/Steps, Metal-Rail Loading Ramp, Metal Culvert Pipe Rack, Concrete Jersey Rail Loose Mix Bin, Metal-Clad Flammable Shed, and Concrete Fuel Tank Basin

Bid Item No.	Sample ID	Type of Material	Location of Material	Friability Category	Field Measure	Asbestos Type	Percent
		Maintenance Shed	None Located	F			
		Metal Box Trailer	None Located	II NF			
		Spreader Equipment Racks	None Located	F			
		Salt Shed	None Located	II NF			
		Brine Tank & Basin	None Located	F			
		Tank Saddles/Support/Footers	None Located	II NF			
			None Located	F			
			None Located	II NF			

INF = Category I Nonfriable II NF = Category II Nonfriable F = Friable * = Tested By Point Count Procedure
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MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS

Asbestos Survey Report
All materials requiring removal or special handling.

ROUTE: B
 MODOT JOB NO.: N/A
 DISTRICT: SW
 COUNTY: Henry
 DATE OF TESTS: November 16-17, 2011
 PARCEL NO.: SW-0003 (Ulrich MT Lot)
 SITE ADDRESS: 726 NW 1271 Road, Ulrich 64788
 (East Side, 0.2 mile North of Rt 7)

TESTED BY: Frank Reichart
 CERTIFICATION #: 7112010411MOIR11239
 TYPE(S) OF STRUCTURE(S): 5-Bay Metal-Clad Metal-Frame Maintenance Shed with Brick Office Addition on Concrete, Metal Box Trailer, Metal Spreader Equipment Racks, 3-Bay Concrete/Wood-Frame Salt Shed, Brine Tank in Concrete Basin, Metal Tank Saddles & Supports on Concrete, Metal Hoist/Tailgate Racks, Wooden TC Rack, Metal-Rail Tire Bin, Metal Loading Rack/Steps, Metal-Rail Loading Ramp, Metal Culvert Pipe Rack, Concrete Jersey Rail Loose Mix Bin, Metal-Clad Flammable Shed, and Concrete Fuel Tank Basin

Bid Item No.	Sample ID	Type of Material	Location of Material	Friability Category	Field Measure	Asbestos Type	Percent
		Hoist/Tailgate Racks	None Located	F			
			None Located	II Nf			
		Traffic Control Storage Rack	None Located	F			
			None Located	II Nf			
		Tire Bin	None Located	F			
			None Located	II Nf			
		Loading Rack/Steps	None Located	F			
			None Located	II Nf			
		Loading Ramp	None Located	F			
			None Located	II Nf			
		Culvert Pipe Storage Rack	None Located	F			
			None Located	II Nf			

Continued on next page.

INF = Category I Nonfriable

II NF = Category II Nonfriable

F = Friable

* = Tested By Point Count Procedure

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**MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Metals Survey Report of Painted Concrete, Block, Brick Surfaces for Clean Fill Purposes**

ROUTE: B
MODOT JOB NO.: N/A
DISTRICT: SW
COUNTY: Henry
SURVEYED BY: Frank Reichart
DATE OF SURVEY: November 2, 2011
PARCEL NO.: SW-0003 (Urich MT Lot)
SITE ADDRESS: 726 NW 1271 Road, Urich 64788
 (East Side, 0.2 mile North of Rt 7)

TESTED BY: Frank Reichart
DATE OF TESTS: November 2, 2011
TYPE(S) OF STRUCTURE(S): 5-Bay Metal-Clad Metal-Frame Maintenance Shed with Brick Office Addition on Concrete, Metal Box Trailer, Metal Spreader Equipment Racks, 3-Bay Concrete/Wood-Frame Salt Shed, Brine Tank in Concrete Basin, Metal Tank Saddles & Supports on Concrete, Metal Hoist/Tailgate Racks, Wooden TC Rack, Metal-Rail Tire Bin, Metal Loading Rack/Steps, Metal-Rail Loading Ramp, Metal Culvert Pipe Rack, Concrete Jersey Rail Loose Mix Bin, Metal-Clad Flammable Shed, and Concrete Fuel Tank Basin

Sample ID	Color/Location of Material/Substrate	Metals (ppm)												
		As	Cr	Pb	Cd	Se	Ba	Hg	Ag					
	Maintenance Shed													
11MFJR A48	Gray/Interior Floor, NE Office/Concrete	<10	206	18	<41	<3	<670	<11	<32					
11MFJR A49	Red/Interior Floor, Bay Doors/Concrete	<10	171	16	<42	<3	<302	<13	<33					
	Metal Box Trailer													
	No samples taken. No painted surfaces located.													
	Spreader Equipment Racks													
	No samples taken. No painted surfaces located.													
	Salt Shed													
11MFJR A50	Beige/Exterior Walls/Concrete	<52	<226	1,161	<46	<6	<1,503	<17	<35					
11MFJR A51	Cream/Exterior Walls/Concrete	335	1,410	1,346	<43	<6	1,999	<22	<34					
	Brine Tank & Basin													
11MFJR A52	White/Exterior Walls/Concrete	<10	237	11	<45	<4	759	<12	<35					
	Tank Saddles/Support/Footers													
	No samples taken. No painted surfaces located.													

All results are by XRF unless otherwise indicated: a = USEPA SW-846 Method 3050
 b = USEPA SW-846 Method 7471

**MISSOURI DEPARTMENT OF TRANSPORTATION
CONSTRUCTION AND MATERIALS
Metals Survey Report of Painted Concrete, Block, Brick Surfaces for Clean Fill Purposes**

ROUTE: B
MODOT JOB NO.: N/A
DISTRICT: SW
COUNTY: Henry
SURVEYED BY: Frank Reichart
DATE OF SURVEY: November 2, 2011
PARCEL NO.: SW-0003 (Urich MT Lot)
SITE ADDRESS: 726 NW 1271 Road, Urich 64788
 (East Side, 0.2 mile North of Rt 7)

TESTED BY: Frank Reichart *FR*
DATE OF TESTS: November 2, 2011
TYPE(S) OF STRUCTURE(S): 5-Bay Metal-Clad Metal-Frame Maintenance Shed with Brick Office Addition on Concrete, Metal Box Trailer, Metal Spreader Equipment Racks, 3-Bay Concrete/Wood-Frame Salt Shed, Brine Tank in Concrete Basin, Metal Tank Saddles & Supports on Concrete, Metal Hoist/Tailgate Racks, Wooden TC Rack, Metal-Rail Tire Bin, Metal Loading Rack/Steps, Metal-Rail Loading Ramp, Metal Culvert Pipe Rack, Concrete Jersey Rail Loose Mix Bin, Metal-Clad Flammable Shed, and Concrete Fuel Tank Basin

Sample ID	Color/Location of Material/Substrate	Metals (ppm)											
		As	Cr	Pb	Cd	Se	Ba	Hg	Ag				
	Hoist/Tailgate Racks No samples taken. No painted surfaces located.												
	Traffic Control Storage Rack No samples taken. No painted surfaces located.												
	Tire Bin No samples taken. No painted surfaces located.												
	Loading Rack/Steps No samples taken. No painted surfaces located.												
	Loading Ramp No samples taken. No painted surfaces located.												
	Culvert Pipe Storage Rack No samples taken. No painted surfaces located.												
	Loose Mix Bin No samples taken. No painted surfaces located.												

All results are by XRF unless otherwise indicated: a = USEPA SW-846 Method 3050
 b = USEPA SW-846 Method 7471

