



April 20, 2018

Ms. Carolyn Pajoum
Evansville Department of Metropolitan Development
Room 306 Civic Center Complex
1 NW Martin Luther King, Jr. Blvd.
Evansville, IN 47708-1869

RE: Asbestos Building Inspection for 306 S. Bosse Ave, Evansville, Indiana – Crane Project #118-2007

Dear Ms. Pajoum:

On April 5, 2018 Ellen Mullen of Crane Environmental Services, LLC conducted an Asbestos Building Inspection to determine if there was any Asbestos Containing Material (ACM) present at the subject property. The site is a one and a half story vacant house with a finished attic, which is scheduled to be demolished.

Great care was taken to account for all spaces within the building. Hidden spaces were evaluated by physical or visual inspection as reasonably accessible. Hidden spaces include inaccessible pipe chases, sub-walls behind exposed walls, layers of tile under carpet or other tile, roofing materials under impenetrable surfaces, inaccessible sections of the building, etc. All hidden layers accessible through minor alterations were observed and tested if suspected for ACM's. Some hidden areas were assumed to contain the same materials as accessible areas that were observed.

The building inspected is vacant and may be in disrepair and in some circumstances have inaccessible areas or areas that are dangerous to enter. These areas are viewed by the inspector the best way that he/she can and may have asbestos containing material that was not sampled or noted in the report. In addition, asbestos containing roofing material may be covered by other layers of roofing, leaves, or is not viewable because of the close proximity of the adjacent buildings. The notification form attached to this report has directions as to how to handle suspect asbestos containing material that is found during demolition. If additional asbestos containing material is discovered, it should be handled according to the instructions on the attached notification form. Crane will in turn issue a revised report to the owner.

No bulk samples and no duplicate samples of suspect asbestos containing material were collected and sent to a laboratory for analysis.

There is Regulated Asbestos Containing Material (RACM), Category I, and Category II ACM located in the house as indicated in the table below. Regulated ACM means (a)

Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material during demolition or renovation operations. All floor tile, sheet vinyl flooring, asphalt roofing products, and flashing present was presumed to be Category I non-friable Asbestos Containing Material (ACM). The quantities of RACM and Category I and Category II ACM are summarized in the table below.

Location	Material	Column #3		Column #4		Column #5	
		RACM To Be Removed		Category I & II Non-Friable To Be Removed		Category I & II Non-Friable Not To Be Removed	
		SqFt	CuFt	SqFt	CuFt	SqFt	CuFt
Roof	Asphalt Roofing (Assumed)	0	0	0	0	1,899.00	59.34
Kitchen, Utility Room	Floor Tile & Sheet Vinyl Flooring (Assumed)	0	0	0	0	224.00	9.33
	Total	0	0	0	0	2,123.00	68.68

All quantities are approximations. Measurements were taken where permitted and estimated where measurement was not feasible.

The RACM and Category I & II Non-Friable listed in the 3rd and 4th columns above need to be removed by an Indiana Licensed Abatement Contractor prior to demolition. The Non-Friable Category I & II ACM listed in the 5th column can remain on the substrate during demolition and disposed of in the landfill.

I have attached the laboratory results, the field inspection maps and notes, and the "Notification of Demolition and Renovation Operations" with instructions to submit to IDEM prior to demolition.

If you have any questions, please call at your convenience.

Sincerely,



Ellen Crane Mullen
Asbestos Building Inspector #194001096
Expiration Date 4/15/2019

Enclosures



1120 Star Gate Road

Evansville, IN 47725

Phone: (812) 868-0709

Fax: (812) 868-1232

E-mail: ces@crane-es.com

**Indiana Department of Environmental Management
GUIDANCE FOR PREPARING ASBESTOS
DEMOLITION/RENOVATION NOTIFICATIONS**

****Per Indiana Rule 326 IAC 14-10-3(1), all notifications to the IDEM must be submitted on State Form Number 44593.**

Per 326 IAC 14-10-5, demolition/renovation fees will be assessed quarterly to owners/Operators submitting notifications during the previous quarter.

I. Type of Notification -326 IAC 14-10-3(4).

- A. If this is the original notice, please check the appropriate space on the notification form.
- B. If this is a revised notice, please check the appropriate space on the notification form. The revised notice must be postmarked and sent by certified mail, return receipt requested, at least 5 working days or delivered at least 2 working days before the start date of asbestos stripping or removal specified in: (1) the notice being revised **and** (2) the new revised notice. Facsimiles **will** be accepted by the IDEM.
- C. All revisions must include a copy of the notice being revised.
- D. If this is a canceled notice, please check the appropriate space on the notification form.
- E. Courtesy Notification

II. Facility Information - 326 IAC 14-10-3(3)(B) and (R)

- A. Either the owner or operator must submit the notice.
- B. The owner means the individual(s) who own the property or lease the property.
- C. The operator means the asbestos removal contractor or demolition contractor.
- D. Specify the name, address, telephone number, Indiana license number and license expiration date, of the:
 - 1. asbestos removal contractor,
 - 2. inspector who conducted the assessment prior to demolition or renovation and
 - 3. project designer required or asbestos projects at schools K-12, or if project designer is used for non-school projects must be licensed.

III. Type of Operation - 326-IAC 14-10-3(3)(C), (O) and (S)

- A. Refer to the definitions of demolition, renovation, and emergency renovation Operation in 326-IAC 14-10-2.
- B. Ordered demolitions and emergency renovation operations have additional

Notification requirements. Owner/operator must also complete Section XV or XVI of notification form.

C. Demolition by intentional burning must comply with an approved Variance from Opening Burning Regulation 326IAC 4-1.

IV. Is Asbestos Present? - Required by Federal 40 CFR Part 61, Subpart M

- A. If asbestos is present, indicate “yes” in the space provided.
- B. If asbestos is not present, indicate “no”.

V. Procedures, Including Analytical Methods, if appropriate, Used to Detect the Presence and Amount of Asbestos Material - 326 IAC 14-10-3(3)(E).

Describe how the asbestos was detected and, if samples were analyzed, specify the amount of friable asbestos visually during a walk-through inspections using a tape measure, blueprints, or pacing. Analytical methods could include the collection of samples and sample analyses by a polarized light microscope with dispersion staining.

For samples that test under 10% asbestos content: An owner or operator may (1) elect to assume material to be greater than 1% asbestos, or, (2) require verification by point counting in which the point counting result will supercede the visual estimation. Either choice and result should be stated on the notice when a sample is under 10% asbestos.

VI. Approximate Amount of Asbestos to be Removed - 326 IAC 14-10-3(3)(F)

- A. Specify the amount of regulated (friable) asbestos-containing material to be removed as follows:
 - 1. linear feet on pipes,
 - 2. square feet (surface area) on the facility components, **and**
 - 3. total cubic feet (volume) on or off all facility components. (All reported regulated amounts must be converted to cubic feet).
- B. Estimate the approximate amount of Category I and Category II non-friable asbestos-containing material in the affected part of the facility that will be removed before demolition.
- C. Estimate the approximate amount of Category I and Category II non-friable asbestos-containing material in the affected part of the facility that will not be removed before demolition.

VII. Scheduled Dates of Asbestos Stripping/Removal - 326 IAC 14-10-3(3)(H)

This means the actual start and end dates of the asbestos stripping or removal.

VIII. Scheduled Dates of Asbestos Stripping/Removal - 326 IAC 14-10-3(3)(H)

This means the starting and ending dates of the total demolition or renovation operation. For example: A renovation project may be scheduled from February 1 through March 15, 1995, however, the actual asbestos removal will occur from February 15, through 20, 1995. Demolition **must** start on date given in most recent notification.

IX. Facility Description - 326 IAC 14-10-3(3)(D) and (G)

Include the building name, floor and number of the room(s) where the asbestos stripping or removal will take place. Provide enough detail that an unfamiliar inspector can find the asbestos project without asking anyone.

X. Description of planned Demolition or Renovation Work, Methods/Techniques to be Used, and Affected Facility Components - 326 IAC 14-10-3(3)(K)

Briefly describe the methods to be used to conduct the demolition or renovation. For renovations, these methods may include gross removal, glove bag removal, hand stripping or scraping. For demolitions, methods may include a wrecking Ball, bulldozer, dynamite, or unbolting panels or sections and carefully lowering to the ground. Affected facility components may include pipe wrap, floor tile, sprayed-on insulation, transite, etc.

XI. Description of Work Practices and Engineering Controls To Be Used To Prevent Emissions of Asbestos At the Site, Including Asbestos Stripping, Removal, and Waste Handling Procedures and the Procedures to Prevent Non-Friable Asbestos Material from Becoming Friable in the Course of the Project 326 IAC 14-10-3(3)(L)

A. Examples of work practices and engineering controls to prevent asbestos emissions at the site would include: the use of water or wetting agents, containments, and negative air units during removal; placing into leak-tight containers or wrapping with six (6) mil thick polyethylene plastic sheeting which is properly labeled prior to disposal, etc.

B. Examples of removal and waste handling procedures to prevent non-friable material from becoming friable would include: removing by sections or units taking care not to crumble, pulverize, or reduce to powder, using water to prevent any emissions, placing into leak-tight containers or wrapping with six (6) mil thick plastic which is properly labeled prior to disposal (including name or waste generator and location at which the waste was generated), etc.

XII.** Description of Procedures to be Followed in the Event that Unexpected Asbestos is Found or Previously Non-Friable Asbestos Material Becomes Crumbled, Pulverized or Reduced to Powder - 326 IAC 18-3 and 326 IAC 14-10-3(3)(M).

A. If the amount of unexpected asbestos or previously non-friable asbestos material is > 3 LnFt on pipes, 3 SqFt on other facility components, or a total of 0.75 CuFt on or off all facility components, then an accredited contractor (unless in-house accredited

personnel) with accredited personnel must implement the asbestos removal project in accordance with the requirements of 326 IAC 14-10.

- B. Pursuant to 326 IAC 14-10, a revised demolition/renovation notification must be submitted to the IDEM, which reflects the change in the amount of affected asbestos-containing material. The revised notice must also reflect the new asbestos removal start date, if applicable.

** Required by 40 CFR Part 61, Subpart M

XIII. Waste Transporter - 326 IAC 14-10-3(3)(T)

Provide the name, address and telephone number of only the asbestos waste transporter. This should include the waste transporter's name, street address, city, state, zip code, contact person, and telephone number.

XIV. Waste Disposal site - 326 IAC 14-10-3(3)(N)

Provide the name and location of the sanitary landfill where the asbestos-containing waste material will be deposited. This should include the name, street address, city, state, zip code, waste disposal site contact person, and telephone number.

XV. If Demolition Ordered by a Governmental Agency, Identify the Agency and Attach a Copy of the Order - 326 IAC 14-10-3(3)(O)

- A. Provide the name, title and authority of the of the state or local governmental representative who has ordered the demolition .
- B. The authority is the applicable state or local regulation under which the demolition order has been issued.
- C. Attach a copy of the demolition order to the notice.

XVI. Emergency Renovations - 326 IAC 14-10-3(3)(S)

- A. Specify
 1. the date and hour that the emergency occurred,
 2. a description of the sudden unexpected event, and
 3. an explanation of how the event has caused emergency conditions
- B. An "emergency renovation operation" is a renovation operation that was not planned but results from a sudden, unexpected event. This term includes operations necessitated by non-routine failures of equipment.

XVII. Certification Statement and Signature by Owner/Operator - 326 IAC 14-10-3(3)(O) and (P)

Self-explanatory.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NOTIFICATION OF DEMOLITION AND RENOVATION OPERATIONS

118-2007

State Form 44593 (R2 / 8-99)

I. TYPE OF NOTIFICATION (check one): Original _____ Revised * _____ Canceled _____ Courtesy _____ * Must include copy of notification which is being revised					
II. FACILITY INFORMATION (identify owner, removal contractor, demolition contractor, inspector, and project designer)					
Owner: _____					
Address: _____					
City: _____		State: _____		Zip: _____	
Contact: _____		Telephone #: _____			
Removal Contractor: _____ Address: _____ City: _____ State: _____ Zip: _____ Contact: _____ Phone: _____ IN License #: _____ Expiration: _____			Demolition Contractor: _____ Address: _____ City: _____ State: _____ Zip: _____ Contact: _____ Phone: _____		
Inspector: _____ Address: _____ City: _____ State: _____ Zip: _____ IN License #: _____ Expiration: _____ Phone: _____			(Required for asbestos projects at schools K – 12) Project Designer: _____ Address: _____ City: _____ State: _____ Zip: _____ IN License #: _____ Expiration: _____ Phone: _____		
III. TYPE OF OPERATION (check one) Renovation: _____ Emergency Renovation: _____ Intentional Burning: _____ Demolition: _____ Ordered Demolition: _____					
IV. IS ASBESTOS PRESENT? (check one) YES: _____ NO: _____					
V. PROCEDURES, INCLUDING ANALYTICAL METHODS, IF APPROPRIATE. USED TO DETECT THE PRESENCE AND AMOUNT OF ASBESTOS MATERIAL _____					
VI. APPROXIMATE AMOUNT OF ASBESTOS (Including Regulated ACM, Category I non-friable Category II non-friable ACM)					
	Regulated ACM to be removed	Non-friable Asbestos Material To be removed		Non-friable Asbestos Material Not to be removed before demolition	
		Category I	Category II	Category I	Category II
Pipes (LnFt)					
Surface Area (SqFt)					
Total Volume (CuFt) on/off Components					
VII. SCHEDULED DATES OF ASBESTOS STRIPPING/REMOVAL: Start: _____ End: _____					
VIII. SCHEDULED DATES OF RENOVATION: Start: _____ End: _____ DEMOLITION: Start: _____ End: _____					
IX. FACILITY DESCRIPTION (Including building name, floor, and room number)					
Building Name: _____					
Street Address: _____					
City: _____		State: _____		County: _____	
Location of removal within building: _____					
Building Size (SqFt): _____			# of Floors: _____		Age: _____
Present Use: _____			Prior use: _____		

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, METHODS/TECHNIQUES TO BE USED, AFFECTED FACILITY COMPONENTS AND TYPE OF MATERIALS REMOVED

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE SITE; INCLUDING ASBESTOS STRIPPING, REMOVAL AND WASTE HANDLING PROCEDURES TO PREVENT NON-FRIABLE ASBESTOS MATERIAL FROM BECOMING FRIABLE IN THE COURSE OF THE PROJECT:

XII. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NON-FRIABLE ASBESTOS MATERIAL BECOMES CRUMBLLED, PULVERIZED, OR REDUCED POWDER:

XIII. WASTE TRANSPORTER

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Contact: _____ Phone: _____

XIV. WASTE DISPOSAL SITE

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Contact: _____ Phone: _____

XV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, IDENTIFY THE AGENCY BELOW AND ATTACH A COPY OF THE ORDER TO THIS FORM. IF THE FACILITY IS NOT INSPECTED PRIOR TO DEMOLITION, THE DEBRIS MUST BE KEPT ADEQUATELY WET. THE DEBRIS MUST THEN BE INSPECTED AFTER DEMOLITION OR ASSUME ALL DEBRIS TO BE CONTAMINATED WITH RACM AND DISPOSED OF APPROPRIATELY TO COMPLY WITH 326 IAC 14-10-1(b).

Name: _____ Title: _____ Date ordered to begin: _____
Authority: _____ Date of Order: _____

XVI. FOR EMERGENCY RENOVATIONS:

Date and time of emergency: _____

Description of sudden, unexpected event: _____

Explanation of how the event caused unsafe conditions or would cause equipment damage: _____

XVII. I HEREBY CERTIFY THAT THE INFORMATION IN THIS NOTIFICATION IS CORRECT AND THAT I WILL ONLY USE INDIANA LICENSED WORKERS AND PROJECT SUPERVISORS, TO IMPLEMENT THIS ASBESTOS PROJECT, WHICH HAVE BEEN TRAINED IN 326IAC 14-10; 40 CFR PART 61, SUBPART M; AND, IF APPLICABLE, INDIANAPOLIS AIR POLLUTION CONTROL BOARD REGULATION 14. THE TRAINED INDIVIDUAL(S) ALONG WITH EVIDENCE THAT THE REQUIRED TRAINING WAS ACCOMPLISHED SHALL BE AVAILABLE AT THE JOB SITE DURING ACTUAL WORKING HOURS.

Owner/operator (signature)

date

Owner/operator (printed)

affiliation

***** OFFICE USE ONLY *****

POSTMARK:

RECEIVED:

REVIEWED BY:

DEFICIENCIES:



KEY	PI	Pipe Insulation	JC	Joint Comp.	FT	Floor Tile	CLK	Caulking
	PJ	Pipe Joint	INS	Insulation	ShVF	Sheet Vinyl	OT	Other (explain)
	HP	Hard Plaster	CT	Ceiling Tile	TR	Transite	UK	Unknown

CES

Crane Environmental Services, Inc.

1120 Star Gate Court

Evansville, IN 47725

(812) 868-0709 Fax: (812) 868-1232

Evansville, IN 47724-7021

SAMPLING DIAGRAM

Project: 118-2007

Sampled By: Ellen Mullen

Location: 306 S. Bosse Ave

Date: 4/5/2018

3:30pm - 3:50pm

First Floor

Roofing: ☒ Shingles ☐ Rolled ☐ Other

Siding: ☐ Transite ☒ Wood ☐ Other

Garage: Yes ☒ No ☐ Shed

G. Roof: ☐ Shingles ☐ Rolled ☐ Other

Basement: Yes ☒ No ☐

2nd Floor: ☒ Finished ☐ Unfinished ☐ No



KEY	PI	Pipe Insulation	JC	Joint Comp.	FT	Floor Tile	CLK	Caulking
	PJ	Pipe Joint	INS	Insulation	ShVF	Sheet Vinyl	OT	Other
	HP	Hard Plaster	CT	Ceiling Tile	TR	Transite	UK	Unknown

Evansville, IN 47724-7021

KEY	PI	Pipe Insulation	JC	Joint Comp.	FT	Floor Tile	CLK	Caulking
	PJ	Pipe Joint	INS	Insulation	ShVF	Sheet Vinyl	OT	Other
	HP	Hard Plaster	CT	Ceiling Tile	TR	Transite	UK	Unknown