

# NARRATIVE REPORT

## 1.0 BUILDING INFORMATION

Northern Crops Institute was originally constructed in 1983; the building has had no major renovations.

Northern Crops Institute is a three-story, 25,143 ft<sup>2</sup> building which primarily serves as office areas and work areas for agricultural personnel. Harris Hall (A028) is attached to the north side of the Northern Crops Institute and is reported separately. The Durum Mill, a 1990 addition to the Northern Crops Institute and Harris Hall, is reported with Harris Hall (A028).

The interior floor finishes included floor tile, carpet, and concrete; the interior wall finishes included gypsum wallboard, concrete block, and brick; and the interior ceiling finishes included ceiling tile, gypsum wallboard, metal, and concrete. The roofing system is a flat rubber-membrane roof and the exterior of the structure is brick.

The piping systems were insulated; fiberglass insulation (without hard fittings) is located throughout the building. Steam enters the building from Harris Hall (A028) and domestic water enters the building in room 42. HVAC systems located in the building consisted of forced air furnaces with variable air volume boxes equipped with heating/cooling coils throughout the building.

## 2.0 ASBESTOS SURVEY INFORMATION

Northern Crops Institute was surveyed as part of a larger project on NDSU's Fargo, ND Campus. This report is part of "Volume 9" of a nine volume series. This report includes building specific information only; please refer to the opening section of "Volume 9" for methodologies, definitions, and other pertinent supporting information.

A total of 39 samples were collected from suspect asbestos-containing materials (ACM) from the Northern Crops Institute on May 14, 2007, 3 additional samples were collected on November 20, 2007, and 1 additional sample was collected on November 29, 2007. Laboratory analysis results indicate **6 of these samples tested positive for asbestos.**

### 2.1 Suspect Materials Identified and Sampled

Encapsulant on Fiberglass Insulation	Sink Undercoating
Ceiling Tile (2 types)	Baseboard Adhesive
Carpet Mastic	Black Layer (on fiberglass)
HVAC Duct Caulk	Door Caulk
Floor Tile	Floor Tile Mastic
Spray-on Fireproofing	Gypsum Wallboard
Joint Compound	Exterior Window Glazing (2 types)
Exterior Window Caulk	Sink/Counter Undercoating
Transite Fume Hood	

The Asbestos Bulk Sample Results Table includes asbestos sampling data.

2.2 **Asbestos Containing Materials**

White Sink Undercoating  
Exterior Window Glazing (around main entry)  
Mastic for 12" White Floor Tile w/ Brown Marks  
Black Sink/Counter Undercoating  
Transite Fume Hood

The ACM Locations/ Friable Materials Assessments Table includes ACM locations data.

2.3 **Cost Estimates**

Legend Technical Services Inc. estimates abatement costs (removal & disposal) of ACM for Northern Crops Institute as follows:

ACM	QUANTITY	UNIT COST	TOTAL COST
Asbestos Floor Tile Mastic	3,132 ft <sup>2</sup>	\$4.00/ft <sup>2</sup>	\$12,528.00
Asbestos Window Glazing	36 ea	\$225.00/ea	\$8,100.00
Asbestos Sink Undercoating	6 ea	\$150.00/ea	\$900.00
Asbestos Sink/Counter Undercoating	1 ea	\$350.00/ea	\$350.00
Asbestos Transite Fume Hood	1 ea	\$350.00/ea	\$350.00
<b>Total Estimated Abatement Costs:</b>			<b>\$22,228.00</b>

**LEGEND TECHNICAL SERVICES, INC.**  
ACM LOCATIONS/FRIABLE MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
NORTHERN CROPS INSTITUTE (BUILDING A093)

ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. <sup>1</sup>	NOTES
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**Room 41B**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	120 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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**Room 42**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	24 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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**Room 43**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	27 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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**Room 44**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	55 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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**Room 47**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	72 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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**Room 141**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	65 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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\* = Non-Friable materials were not assessed

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ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. <sup>1</sup>	NOTES
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**Room 142**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	35 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
White Sink Undercoating	15% Chrysotile	1 ea	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	There is one sink in the room, it is along the west wall.

**Room 143A**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	145 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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**Room 144**

White Sink Undercoating	15% Chrysotile	1 ea	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The sink is in the northeast corner.
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**Room 144A**

White Sink Undercoating	15% Chrysotile	1 ea	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The sink is along the middle of the south wall.
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**Hallway 188**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	716 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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**Room 241**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	1,189 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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\* = Non-Friable materials were not assessed

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ACM LOCATIONS/FRIABLE MATERIALS ASSESSMENTS TABLE

LEGEND No. 0700048 (NDSU)  
NORTHERN CROPS INSTITUTE (BUILDING A093)

ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. <sup>1</sup>	NOTES
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**Room 242**

White Sink Undercoating	15% Chrysotile	3 ea	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The three sinks are in the counter systems in the middle of the room
Transite Fume Hood	15% Chrysotile	1 ea	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The transite fume hood is in the northwest corner of the room.

**Room 243**

Black Sink/Counter Undercoating	5% Chrysotile	1 ea	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The sink is in the southwest corner of the room. The undercoating is on the sink and the counter. Approx: 2'x9'
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**Room 288**

Mastic for 12" White Floor Tile w/ Brown Marks	15% Chrysotile	684 ft <sup>2</sup>	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	Mastic only, the floor tile does not contain asbestos.
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**Exterior**

Window Glazing	15% Chrysotile	36 ea	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The asbestos window glazing is on the windows surrounding the main entrance on the east side of the building.
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<sup>1</sup>Assessment Categories:

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|---|---|
| 1) Damaged or Significantly Damaged TSI ACM                   | 5) ACM with Potential for Damage                      |
| 2) Damaged Friable Surfacing ACM                              | 6) ACM with Potential for Significant Damage          |
| 3) Significantly Damaged Friable Surfacing ACM                | 7) Any Remaining Friable ACM or Friable Suspected ACM |
| 4) Damaged or Significantly Damaged Friable Miscellaneous ACM |   |

**End**