

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 ft² 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 ² | \$4.00/ft ² | \$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 |
| Total Estimated Abatement Costs: | | | \$22,228.00 |

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. ¹ | NOTES |
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|

Room 41B

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

Room 42

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

Room 43

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

Room 44

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

Room 47

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

Room 141

| | | | | | | | | |
|---|----------------|--------------------|------------------------------|------|------|--|------|--|
| Mastic for 12" White Floor Tile w/ Brown Marks | 15% Chrysotile | 65 ft ² | Non-Friable Miscellaneous | N/A* | N/A* | | N/A* | Mastic only, the floor tile does not contain asbestos. |
|---|----------------|--------------------|------------------------------|------|------|--|------|--|

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|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|
|--------------|---------------|------------------|----------|-----------------------|---------------------|--------------------|------------------------------|-------|

Room 142

| | | | | | | | | |
|---|----------------|--------------------|------------------------------|------|------|--|------|---|
| Mastic for 12" White Floor Tile w/ Brown Marks | 15% Chrysotile | 35 ft ² | 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 ² | Non-Friable Miscellaneous | N/A* | N/A* | | N/A* | Mastic only, the floor tile does not contain asbestos. |
|---|----------------|---------------------|------------------------------|------|------|--|------|--|

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. |
|--|----------------|------|------------------------------|------|------|--|------|--------------------------------------|

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. |
|--|----------------|------|------------------------------|------|------|--|------|---|

Hallway 188

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

Room 241

And 299L--Abated July 2024

| | | | | | | | | |
|---|----------------|-----------------------|------------------------------|------|------|--|------|--|
| Mastic for 12" White Floor Tile w/ Brown Marks | 15% Chrysotile | 1,189 ft ² | Non-Friable Miscellaneous | N/A* | N/A* | | N/A* | Mastic only, the floor tile does not contain asbestos. |
|---|----------------|-----------------------|------------------------------|------|------|--|------|--|

* = Non-Friable materials were not assessed

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ACM LOCATIONS/FRIABLE MATERIALS ASSESSMENTS TABLE

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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' |
|--|---------------|------|------------------------------|------|------|--|------|---|

Room 288

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

299L see 241-Abated July 2024

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. |
|---------------------------|----------------|-------|------------------------------|------|------|--|------|---|

¹Assessment Categories:

- 1) Damaged or Significantly Damaged TSI ACM
- 2) Damaged Friable Surfacing ACM
- 3) Significantly Damaged Friable Surfacing ACM
- 4) Damaged or Significantly Damaged Friable Miscellaneous ACM

- 5) ACM with Potential for Damage
- 6) ACM with Potential for Significant Damage
- 7) Any Remaining Friable ACM or Friable Suspected ACM

End