

NARRATIVE REPORT

1.0 BUILDING INFORMATION

The original date of construction for Construction Management Engineering was not immediately available; the building has had no major renovations.

Construction Management Engineering is a three-story, 25,143 ft² building which primarily serves as office areas and work areas for agricultural personnel. Dolve Hall (A018) is attached to the east side of Construction Management Engineering and is reported separately; Civil Engineering (A066) is attached to the east side of Construction Management Engineering and is reported separately.

The interior floor finishes included floor tile, concrete, rubber flooring, and carpet; the interior wall finishes included gypsum wallboard, concrete block, and brick; and the interior ceiling finishes included ceiling tile and metal. 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 in the building. Steam and domestic water enter the building from Civil Engineering (A066). A large HVAC duct is located in room 118A with hard insulation. HVAC systems located in the building consisted of steam radiators.

2.0 ASBESTOS SURVEY INFORMATION

Construction Management Engineering 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 30 samples were collected from suspect asbestos-containing materials (ACM) from the Construction Management Engineering on July 14, 2007 and 4 additional samples were collected on January 29, 2008. Laboratory analysis results indicate **8 of these samples tested positive for asbestos.**

2.1 Suspect Materials Identified and Sampled

Gypsum Wallboard	Joint Compound
Ceiling Tile (6 types)	Rubber Flooring Adhesive
Floor Tile (3 types)	Floor Tile Mastic (3 types)
HVAC Duct Liner	HVAC Duct Insulation
HVAC Duct Canvas Wrap	Baseboard Adhesive
Exterior Overhang Surfacing	Exterior Window Glazing
Exterior Building Seam Caulk	Window Sill Material
Exterior Window Caulk	Exterior Door Caulk

The Asbestos Bulk Sample Results Table includes asbestos sampling data.

2.2 Asbestos Containing Materials

2'x4' White Ceiling Tile with Large and Small Pinholes
Mastic for 12" Light/Dark Gray Mottled Floor Tile
12" White Floor Tile with Blue and Gray Specks and Mastic
Window Sill Material
Exterior Window Caulk

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 Ceiling Tile	5 ea	\$100.00/ ea	\$500.00
Asbestos Floor Tile and/or Floor Tile Mastic	2,297 ft ²	\$4.00/ ft ²	\$9,188.00
Asbestos Window Sill Material	26 ft	\$25.00/ ft	\$650.00
Asbestos Window Caulk	6 ea	\$125.00/ ea	\$750.00
Total Estimated Abatement Costs:			\$11,088.00

2.4 Survey Notes

The east wall of hallway 188 of Construction Management Engineering is an exterior wall of Dolve Hall (A018); it is a brick wall. The wall and all building materials on the wall are reported with Dolve Hall (A018) and are not included in this report.

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

LEGEND No. 0700048 (NDSU)
CONSTRUCTION MANAGEMENT ENGINEERING (BUILDING A094)

ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSES. CAT. ¹	NOTES
Room 118 Abated June 2009								
12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	653 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Room 118A Abated June 2009								
12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	180 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Room 120 Abated December 2009								
12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	415 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos; they are under the carpet.
Room 120A Abated December 2009								
12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	160 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Room 120B Abated December 2009								
12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	80 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Mastic for 12" Light/Dark Gray Mottled Floor Tile	5% Chrysotile	40 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The 12" Light/Dark Gray Mottled floor Tile is a replacement tile in this room; its mastic contains asbestos, the tile is negative.
Room 120 Abated December 2009								
12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	160 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.

* = Non-Friable materials were not assessed

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LEGEND No. 0700048 (NDSU)
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ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. ¹	NOTES
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Room 120E Abated December 2009

12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	96 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
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Room 120F

12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	120 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Window Sill Material	10% Chrysotile	5 ft	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The window sill is in the northeast corner of the room.

Room 102G

12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	120 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Window Sill Material	10% Chrysotile	15 ft	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The window sill is on the north wall of the room.

Room 102H

12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	141 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
Window Sill Material	10% Chrysotile	5 ft	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The window sill is in the northwest corner of the room.

* = Non-Friable materials were not assessed

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LEGEND No. 0700048 (NDSU)
CONSTRUCTION MANAGEMENT ENGINEERING (BUILDING A094)

ROOM/ ACM	ASBESTOS TYPE	EST. QUANTITY	ACM TYPE	MATERIAL CONDITION	DAMAGE POTENTIAL	LOW MOD HIGH	ASSESS. CAT. ¹	NOTES
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Room 102J Abated December 2009

12" White Floor Tile with Blue and Gray Specks and Mastic	2-5% Chrysotile	132 ft ²	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The floor tile and the mastic both contain asbestos.
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Hallway 188

Window Sill Material	10% Chrysotile	6 ft	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The window sill is on the north wall of the hallway.
2'x4' White Ceiling Tile with Large and Small Pinholes	10% Amosite	5 ea	Friable Miscellaneous	Good	Physical <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	Air Erosion <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Vibration <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	6 The ceiling tile has been used as a replacement tile in this hallway. Refer to the ACM locations map for approximate locations.

Abated December 2015

Exterior

Window Caulk	2% Chrysotile	6 ea	Non-Friable Miscellaneous	N/A*	N/A*		N/A*	The caulk is around the 6 windows on the north end of the building.
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¹Assessment 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