



**SPCA ANIMAL SHELTER
ASBESTOS SURVEY REPORT**



May 2013

Prepared For: City of Saskatoon – Infrastructure Services Department
1101 Avenue P North, Saskatoon SK, Canada S7L 7K6
Attn: Brent Anderson

Prepared By: Bersch & Associates Ltd.
Project No. : B67.13

1.0 EXECUTIVE SUMMARY

The asbestos audit of the SPCA Animal Shelter located at 5028 Clarence Avenue South Saskatoon, SK. entailed the inspection of all accessible suspect asbestos-containing materials (ACM) located within the facility. Materials inspected included pipeline insulation, floor covering materials, ceiling tiles and drywall mud compound. Please refer to **Appendix I for Bulk Sample Analysis** results.

- No accessible asbestos-containing materials were identified within SPCA Animal Shelter.
- **Any material located within ceilings, wall cavities, pipe chases or other inaccessible areas or areas of limited access shall be considered asbestos-containing until testing of the material can determine the presence or absence of asbestos.**

Included in **Appendix II** of this report is a **Floor Plan** of the facility identifying the bulk sample locations. **Photos** of suspect materials sampled are also included in **Appendix III**.

2.0 INTRODUCTION

Bersch & Associates Ltd. was retained by the City of Saskatoon to conduct bulk sampling to verify the presence or absence of asbestos content within the SPCA Animal Shelter to satisfy the government registry. Due to the findings and size of the facility a full asbestos audit was completed so further investigation would not be required. The purpose of the survey was to identify all accessible Asbestos-Containing Materials (ACM) located within the facility and note any concerns relating to the ACM identified. This report gives an account of the inspection and our firm's recommendations on control options to be implemented to bring the facility in compliance with the Province of Saskatchewan Occupational Health and Safety Act and Regulations. Dustin Fraess of Bersch & Associates Ltd. completed the survey in May 2013.

3.0 METHODOLOGY

Bersch & Associates Ltd. conducted the survey of the SPCA Animal Shelter in May 2013. The primary documents for guidance and criteria in this survey were the Province of Saskatchewan "Occupational Health and Safety Act and Regulations, 1996", Province of Saskatchewan "Managing Asbestos", and the U.S. Environmental Protection Agency "Guidance for Controlling Asbestos Containing Materials in Buildings". The USEPA document identifies factors associated with the "condition" and the "potential for disturbance or erosion" of asbestos containing materials (ACM). These factors help to determine potential for exposure to ACM and were used to make a qualitative evaluation of the material. It should be noted that the recommendation of "Management" Asbestos Abatement Action is based upon the premise that renovations are not scheduled in that area that will require disturbing or violating the asbestos containing material. In the event that renovations are scheduled further testing may be necessary.

In total, seven (7) bulk samples of suspect asbestos-containing materials were collected within the SPCA Animal Shelter. Refer to Appendix I for a copy of the Bulk Sample Analysis Report. All bulk samples collected were analyzed by Bersch & Associates Ltd. laboratory in accordance with the current U.S. 40 CFR Part 763, Vol. 52, No.210 for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as greater than 1%.

4.0 RECOMMENDATIONS

No accessible asbestos-containing materials were identified within the SPCA Animal Shelter therefore there are no recommendations to mention. Although unlikely due to bulk sample results, please note that any material located within ceiling spaces, wall cavities, pipe chases or other inaccessible areas or areas of limited access should be treated as asbestos-containing until testing of the material can determine the presence or absence of asbestos.

5.0 ASBESTOS ABATEMENT DISCUSSION

Although no accessible asbestos was identified within the facility, the following is provided for informational purposes.

Asbestos is a known carcinogen and is listed in the Province of Saskatchewan under the Occupational Health and Safety Appendix, Part V as a Hazardous Chemical Substance and any release of asbestos fibres into the atmosphere creates a potential health hazard. Although the mechanism and epidemiology of asbestos carcinogenesis is not yet well defined, accumulating evidence suggests the significance of exposure at even very low fibre concentrations and hence human exposure should be kept to a minimum. It should be noted however that asbestos is a natural mineral and a measurable background concentration can be detected in any location sampled (inside buildings, outside buildings, urban, rural, etc.). The recommendations of the report are therefore intended to keep the potential exposure to an absolute minimum with the knowledge that a zero exposure is not possible.

Asbestos containing materials have been used in a wide variety of applications. Of particular concern, is the group of so called friable products. A friable product is one which can be crumbled or reduced to powder or smaller fragments by hand pressure. Publications from the U.S.E.P.A. as early as 1977 have indicated the potential hazard of asbestos exposure in buildings containing these friable products. The two main uses of friable asbestos products are as spray insulation (thermal, acoustic or fireproofing) on deck and/or beams or as thermal insulation on piping or mechanical equipment. A large amount of non-friable asbestos-containing materials have also been used in building construction such as asbestos cement board and asbestos containing vinyl flooring.

The mere presence of a friable asbestos containing material does not imply that there is an actual presence of elevated airborne fibre. As numerous studies have indicated, elevated asbestos fibre levels are generally found when settled dust or the actual asbestos containing material itself is

disturbed by maintenance, renovation, inadvertent contact or vibration. The factors considered in the Environmental Protection Agency (USEPA) exposure assessment (condition of material, water damage, activity, movement, exposed surface area, accessibility, friability and presence in an air stream) often give some indication of the likelihood of fibre release but are not in any way definitive in determining whether a hazard exists or not. That is, even if the most friable product exists in a building, elevated fibre levels will not likely occur unless there is some disturbance by physical contact, vibration or an air stream.

There are four possible approaches to control exposure to airborne asbestos once a friable material is identified in a building. These methods briefly are as follows:

- A) Removal** - Asbestos material is removed and disposed of by burial and replaced by non-asbestos materials.
- B) Encapsulation** - Asbestos material is coated with a bridging or penetrating sealant.
- C) Enclosure** - Asbestos containing materials are separated from the building environment by barriers such as suspended ceilings or cladding materials.
- D) Deferred Action or Management and Custodial Control** - The Province of Saskatchewan Human Resources, Labor and Employment Branch under the Occupational health and Safety Regulations publish a document outlining "The Management of Asbestos". In the guide for compliance, an action plan is outlined for management of the asbestos materials identified and in summary is:
 - 1. Identification, which has been accomplished by this report.
 - 2. Development of Written Handling Procedures for maintenance personnel or often arrangements are made for a qualified contractor to conduct the necessary removal or spot maintenance prior to the regular staff conducting maintenance.
 - 3. Asbestos Abatement Awareness and Process Training if the regular maintenance personnel are required to conduct asbestos related activities.
 - 4. Inspection on regular basis is conducted to determine the ongoing condition of the material.

6.0 REFERENCES

- .1 Province of Saskatchewan "The Occupational Health and Safety Act and The Occupational Health and Safety Regulations" Office Consolidation, December 1996.
- .2 Province of Saskatchewan Human Resources, Labor, and Employment "The Management of Asbestos" January, 1991.
- .3 USEPA, U.S. Environmental Protection Agency, "Guidance for Controlling Asbestos-Containing Materials in Buildings". Washington, DC: Office of Toxic Substances, USEPA.

APPENDIX I

BULK SAMPLE ANALYSIS REPORT

BERSCH & ASSOCIATES LTD.

July 15, 2013

City of Saskatoon

Infrastructure Services Department
1101 Avenue P North
Saskatoon, Sk.
S7L 7K6

ATTENTION: Brent Anderson

SUBJECT: SPCA - Asbestos Registry Report

Please find attached our laboratory's results for the bulk material samples taken from the SPCA located at 5028 Clarence Avenue South, Saskatoon, SK. The samples were analyzed in our laboratory for the identification of asbestos.

The results for the samples submitted were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client. If any questions arise on the results of the attached information please contact our office. Thank you for this opportunity of service to your firm.

Sincerely,

Dustin Fraess
Bersch & Associates Ltd.
File: B67BLE02

Bersch & Associates Ltd.

B67BAE02

Box 3568

Humboldt, Sask. S0K 2A0

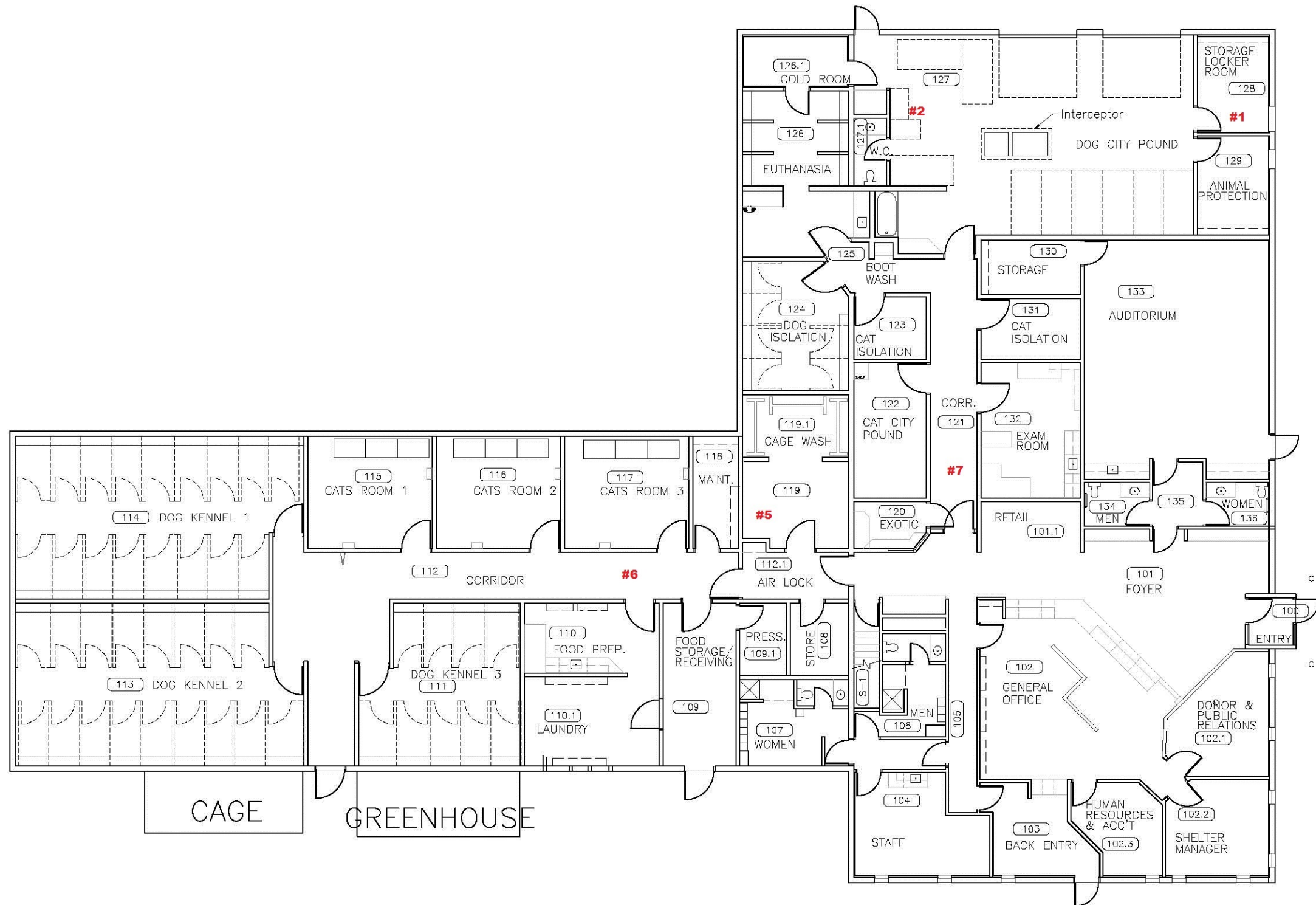
BULK SAMPLE ANALYSIS REPORT**PROJECT NO. B67.13****CLIENT: City of Saskatoon****Infrastructure Services - Facilities Branch****Contact: Brent Anderson****Location: SPCA - 5028 Clarence Avenue South, Saskatoon, SK.**

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
1	2-May-13	128 - Sheet floor covering, gray stone pattern with blue, pink and green spec	None detected		WB
2	2-May-13	127 - Attic insulation	None detected		WB
3	2-May-13	B100 - Drywall tape/ mud	None detected		WB
4	2-May-13	B100 - Pipeline insulation	None detected		WB
5	2-May-13	119 - Ceiling board	None detected		WB
6	2-May-13	112 - 2' x 4' ceiling tile	None detected		WB
7	2-May-13	121 - Sheet floor covering, tan with white spec	None detected		WB

APPENDIX II

FLOOR PLANS

- GENERAL NOTES:
1. All dimensions are in millimetres
 2. Drawings are not to be scaled.
 3. All drawings to be read in conjunction with the specifications, unless otherwise noted.
 4. Verify site conditions and location of all utilities prior to the start of construction.
 5. Report all discrepancies to the Consultant.
 6. If in doubt, ask.



- Sample # Location

REV	ISSUED FOR	DATE
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DESIGNED BY:	DRAWN BY:	CHECKED BY:	REQUESTED BY:
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SCALE:	DATE:
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SHEET NAME	Asbuilt
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**Main Floor
Base Plan**

PROJECT TITLE
**531
SPCA
R.R.# 5**

PROJECT NO.	SHEET
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REV. NO.	
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APPENDIX III

PHOTOS

BULK SAMPLE PHOTOS

#1) Sheet Floor Covering



#2) Attic Insulation



#3) Drywall Tape/ Mud



#4) Pipeline Insulation



#5) Ceiling Board



#6) 2' x 4' Ceiling Tile



#7) Sheet Floor Covering



BERSCH & ASSOCIATES LTD.

January 27th, 2017

City of Saskatoon
Facilities and Fleet Management
3130 Laurier Drive
Saskatoon, Sk
S7L 5J7

ATTENTION: Nathan Sommerfeld

SUBJECT: Asbestos Site Investigation – SPCA – 150 Renovation Project.

Mitch Webber of Bersch & Associates Ltd. conducted a site visit on January 23rd, 2017 to investigate and collect bulk samples of material to confirm the presence/absence of asbestos content. The facility was constructed in 1968 with renovations conducted in 1987 & 1991 and is located at 5028 Clarence Avenue South, Grasswood, SK. Five (5) samples were collected and analyzed for the identification of asbestos. Asbestos **was not** detected in the samples. Based on the bulk sampling and site investigation, there does not appear to be an asbestos concern that would reflect on the renovations proposed for the area.

The results for the bulk samples were obtained by examination in accordance with the current USEPA 600/R-93/116 Method for the analysis of asbestos in building materials using polarized light microscopy and dispersion staining techniques. The detection limit of this method is listed as less than 1% by volume.

The SPCA building consists of block walls, drywall walls/ceilings and vinyl sheet flooring. The block walls were drilled into resulting in a hollow block cavity. No insulation was observed in the block wall. Please refer to ***Appendix II – Site Photo's***.

This test report relates only to the materials sent for examination and any use or extension of the information by the client of these results is the responsibility of the client. If any questions arise on the results of the attached information, please contact our office 306.978.6665. Thank you for this opportunity of service!

Sincerely,



Brad Berschiminsky
Bersch & Associates Ltd.
File: B67BLA23G – SPCA - 150

Bersch & Associates Ltd.

B67BAA23G

244-2002 Quebec Avenue
Saskatoon, SK S7K 1W4

BULK SAMPLE ANALYSIS REPORT**PROJECT NO: B67.17****CLIENT: CITY OF SASKATOON - SPCA****CONTACT: NATHAN SOMMERFELD****LOCATION: 5028 CLARENCE AVENUE SOUTH, GRASSWOOD, SK.**

NO.	DATE	SAMPLE INFORMATION	ASBESTOS	%	ANALYST
1	23-Jan-17	104/106/107/110/134/136 - Ceiling Drywall Mud Compound Compilation	No Asbestos Detected		WB
2	23-Jan-17	110 - Lineal Pipe Insulation	No Asbestos Detected		WB
3	23-Jan-17	110 - Concrete Flooring	No Asbestos Detected		WB
4	23-Jan-17	104/106/107/134/136 - Wall Drywall Mud Compound Compilation	No Asbestos Detected		WB

APPENDIX I

SITE PHOTO'S

PHOTO 1 – Block Wall Cavity (Empty)



PHOTO 2 – Concrete Flooring



PHOTO 3 – Drywall Walls/Ceiling

PHOTO 3 – Drywall Walls/Ceiling

