Environment Act License Proposal for

BrunswickSteel

125 Bismarck Street Box 6 Group 525 RR5 Winnipeg, MB

February 2015

Prepared by:

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Executive Summary

This document is an Environment Act Proposal (EAP) as requested by the Province of Manitoba for the Brunswick Steel facilities located at 125 Bismarck Street, Winnipeg, Manitoba. Brunswick Steel has been located on this site since 1970. The information contained in the application was prepared by Brunswick Steel for the specific purpose of application for Environmental Licence and represents our understanding of the requirements of the Province of Manitoba for such application. Environmental impacts considered for this application are generated by operational processes and support our operations.

Brunswick Steel is a steel service centre, which essentially means that we act as the middle man between the streel producing mill and the end use customer. We hold steel products in our inventories until the product is required by the end use customer. At that time, the material is either shipped as is to the customer for processing at their facility. Or, we often process the steel goods by cutting and/or bending, and then shipping it in its semi-finished state for further processing by the customer. The plant is a state-of-the-art facility designed and built in accordance with all applicable regulations. Brunswick Steel strives to provide a safe work environment for its employees and ensure that it acts responsibly towards the surrounding community. Brunswick Steel has been operating in the steel service centre business for over 25 years. Through the use of appropriate technologies, Brunswick Steel has operated in the steel service centre business in a way that respects all aspects of the environment.

Brunswick Steel requests that the Province consider granting a licence under this completed application.

1. Introduction

This application is for an existing steel service centre facility which has been in operation in its current state since 1990.

a. Background

Brunswick Steel has been located on these premises since 1970. The business started as a demolition and salvage company. The business evolved significantly in the early 1990's as we transitioned to a steel service centre. Recently, Manitoba Conservation has requested that Brunswick Steel submit an application for a license. As a result, this proposal is filed for application for a license in accordance with Manitoba Regulation 164/88 for the operation of the Brunswick Steel facility at the subject site.

b. Description of Facility

The Brunswick Steel facility is located in an industrial area within the R.M. of Springfield. Our property and buildings are owned by Copp Holdings Ltd (which is a related company under the same ownership). There are many manufacturing and heavy industrial companies operating in the area. The Brunswick Steel site is approximately 10 acres of land. Of the total site area, there are 2 buildings, 1 shed and 1

outside crane way which cover approximately 105,000 SFT. The majority of the remaining site is covered by gravel. Brunswick Steel's operations consist of the distribution of steel products, including handling, cutting, and bending. The facility contains an office which is attached to the main warehouse for conducting sales, purchasing, production planning and administration. A staff parking lot is located on the north side of the facility, with customer parking in front of the office. All vehicles enter the property on the west side from Bismarck Street. We have an exit to Roderick Street located on the east side of the property.

c. Hours of Operation

Brunswick Steel warehouse staff work in three different shifts from Monday to Friday.

Days 6:45am – 3:15pm Afternoons 2:45pm – 11:15pm Midnights 10:45pm – 7:15am

Management and office administrative operations are typically 8:00am –4:30pm, from Monday to Friday.

d. Method of Operation

Brunswick Steel is a steel service centre. Bulk steel arrives in a semi-raw form and is either sold as-is or it is processed into various metal products. Facility inputs include raw metal product, tools, water for human use, gases used for metal cutting, electricity to operate equipment and natural gas used for the facility radiant heaters.

Operational processes are as follows:

Bulk steel products are delivered on flat deck or closed flat deck trailers by large transport trucks to our receiving department. The products are received and stored on storage racks of various kinds inside the facility or outside on blocking. The metal products are eventually retrieved from storage for as-is sale or for processing. The products are typically processed by one of several types of cutting technology, including laser machines, plasma machines, oxygen-propane cutting machines, saws and a shear. The useful components are removed from the machines and prepared to ship or may require further processing. Any remaining material is either placed back into storage for future use or recycled through a steel recycling company. After taking shape the metal components may be shipped immediately to the customer, or receive rolling, bending, or hole punching as a secondary process depending on customer specifications. Work orders and drawings are utilized to determine the appropriate steps for production. These administrative functions are mainly carried out in the office portion of the facility and are conveyed through plant supervisors who oversee production. Supporting the production operations are a variety of gases, including nitrogen, oxygen and propane. These gases are stored and handled in

accordance with Work Place Health and Safety standards. A small maintenance shop is utilized for storage of tools, spare parts and a small work area for maintenance in the support of operations. The facility is heated using natural gas radiant heaters. Natural gas combustion products are discharged to the atmosphere from various cutting processes (cutting associated with production operations).

e. Certificate of Title

Brunswick Steel is the operating trade name of the organization. The legal company name is Brunswick Enterprises Ltd. The facility is on a property registered to Copp Holdings Ltd. located at 125 Bismarck Street in Springfield, Manitoba.

f. Owner of Mineral Rights

According to the view of Brunswick Steel legal representatives, the owner of the surface and mineral rights beneath the Brunswick Steel property is Copp Holdings Ltd.

2. Surrounding Environment

The Brunswick Steel site is registered industrial and in an industrial area. The neighbouring properties are all used for industrial businesses as well. Located to the north is Buck's Auto, a scrap car recycling facility. To the south is General Scrap, a scrap recycler. On the west, across Bismarck Street is a fenced in property and on the east, across Roderick Street is vacant land. Brunswick Steel is not considering any changes in land use at this time. The nearest residential area is approximately 500 m north/east of the Brunswick Steel facility on the north side of Springfield Road.

a. Topography

The Brunswick Steel site is generally flat with gentle slopes for surface water drainage in accordance with requirements of the Manitoba Building Code.

b. Geological Background

Springfield is Manitoba's oldest and largest rural municipality. Established in 1873, Springfield stretches from urban industrial development on the eastern boundary of the City of Winnipeg, through urban, rural residential, agricultural and natural landscapes, to the Agassiz Provincial Forest on the municipality's eastern boundary. Birds Hill Provincial Park nestles into the northwestern corner of Springfield. While farming is still important in the municipality, today many residents are employed in nearby Winnipeg.

c. Climate

Springfield lies in the middle of the North American continent on a low-lying, flat plain. Due to its location in the Canadian Prairies, and its distance from both mountains and oceans, it has an extreme humid continental climate in that there are great differences between summer and winter temperatures. The openness of the prairies leaves Springfield exposed to numerous weather systems

including blizzards and cold Arctic high pressure systems, known as the Polar high. Winnipeg has four distinct seasons, with short transitional periods between winter and summer.

<u>Temperature</u>												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Daily Average (°C)	-16.4	-13.2	-5.8	4.4	11.6	17	19.7	18.8	12.7	5	-4.9	-13.2
Standard Deviation	4.1	4.2	3.1	2.7	2.1	2	1.4	1.9	1.3	1.8	3.6	4.4
Daily Maximum (°C)	-11.3	-8.1	-0.8	10.9	18.6	23.2	25.9	25.4	19	10.5	-0.5	-8.5
Daily Minimum (°C)	-21.4	-18.3	-10.7	-2	4.5	10.7	13.5	12.1	6.4	-0.5	-9.2	-17.8
Extreme Maximum (°C)	7.8	11.7	23.3	34.3	37	37.8	37.8	40.6	38.8	30.5	23.9	11.7
Extreme Minimum (°C)	-42.2	-45	-37.8	-26.3	-11.1	-3.3	1.1	0	-7.2	-17.2	-34	-37.8
<u>Precipitation</u>												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)	0.2	2.7	9.7	19.2	54.1	90	79.5	77	45.5	32.7	6.9	1.5
Snowfall (cm)	23.7	12.5	16.5	10.6	2.6	0	0	0	0.3	4.8	19.9	23
Total (mm)	19.9	13.8	24.5	30	56.7	90	79.5	77	45.8	37.5	25	21.5

d. Water

i. Surface Water

The nearest major water flow to the Brunswick Steel site is the Red River Floodway, located approximately 2 km east of our facility. The Floodway flows north until it connects back up with the Red River in Lockport, Manitoba. The runoff and wash water from Brunswick Steel drains into the ditches and ultimately flows into the Red River Floodway.

ii. Groundwater

Brunswick Steel uses a ground well for drinking water and basic human requirements. We test our water annually for safe consumption and the information is posted publicly for all customers and employees.

e. Vegetation and Wildlife

The Brunswick Steel site is completely covered in gravel. On occasion we have spotted rabbits, deer, racoons, and various species of birds. With respect to aquatic life and protected species, Brunswick Steel is unaware of any negative impact that their facility has on either of these groups. It is understood that water discharge meets regulatory requirements and any emissions are of acceptable standards. The

noise levels are typical of the surrounding industries and residential areas; ventilation systems, loading and unloading of commercial vehicles and traffic to and from the site.

f. Socio-Economic Environment

i. City of Winnipeg

Brunswick Steel is located in the RM of Springfield at the eastern edge of the City of Winnipeg. Many residents in the area commute to and from Winnipeg which has a population of approximately 660,000. In 2013, The CIBC Metropolitan Economic Activity Index rated Winnipeg's economy as fourth in a national survey of 25 city economies, behind Toronto, Calgary, and Regina. As of 2010, median household income in the city was \$72,050. As of January 2014, approximately 416,700 people are employed in Winnipeg and the surrounding area. Some of Winnipeg's largest employers are government and government-funded institutions, including: the Province of Manitoba, the City of Winnipeg, the University of Manitoba, the Health Sciences Centre, and Manitoba Hydro. Approximately 54,000 people (14% of the work force) are employed in the public sector as of 2008. [105] Large private sector employers include Shaw Communications, Manitoba Telecom Services, Ipsos-Reid, Palliser Furniture, Great-West Life Assurance, Motor Coach Industries, New Flyer Industries, Boeing Canada Technology, Magellan Aerospace, Nygård International, Canad Inns and Investors Group. In 2012, Winnipeg was ranked by KPMG as the least expensive location to do business in western Canada. Like many prairie cities, Winnipeg has a relatively low cost of living. According to the Canadian Real Estate Association, the average house price in Winnipeg was \$260,000 as of 2013. As of May 2014, the Consumer Price Index was 125.8 relative to 2002 prices, reflecting consumer costs at the Canadian average.

Winnipeg was named the Cultural Capital of Canada in 2010 by Canadian Heritage. As of 2012, there are 26 National Historic Sites of Canada in Winnipeg. One of these, The Forks, attracts four million visitors a year. It is home to the Manitoba Theatre for Young People, the Winnipeg International Children's Festival, and the Manitoba Children's Museum. It also features a 30,000-square-foot (2,800 m²) skate plaza, a 8,500-square-foot (790 m²) bowl complex, the Esplanade Riel bridge, a river walkway, Shaw Park, and the Canadian Museum for Human Rights (scheduled to open September 2014). The Winnipeg Public Library is a public library network with 20 branches throughout the city, including the main Millennium Library.

Winnipeg is home to several professional sports teams including the Winnipeg Jets, Winnipeg Blue Bombers and Winnipeg Goldeyes.

ii. First Nations

Winnipeg has a significant and increasing Aboriginal population, with both the highest percentage of Aboriginal peoples (11.7%) for any major Canadian city, and the highest total number of Aboriginals (76,055) for any single non-reserve municipality. The Aboriginal population grew by 22% between 2001 and 2006, compared to an increase of 3% for the city as a whole; this population tends to be younger and less wealthy than non-Aboriginal residents. Winnipeg also has the highest Métis population in both

percentage (6.3%) and numbers (41,005); the growth rate for this population between 2001 and 2006 was 30%.

iii. Protected Areas

Immediately north of our property and on the other side of Springfield Road is Harbourview Park. This park is located on a retired garbage dump and is used primarily for recreation. The common uses are golf, tennis, lawn bowling, dog walking and picnic facilities. Birds Hill Provincial Park is located approximately 23 km north of the Brunswick Steel site and covers 8300 acres. The provincial park features a mixture of aspen and oak forest with open prairie/savannah, spruce, bog areas and mixed boreal forest communities, not commonly found so close together.

Land Use Designation

The RM of Springfield's land use zoning designations for the subject site are M1. Light Industrial. The neighbouring properties appear to be a mix of M1, Light Industrial and M2, Heavy Industrial. No change will be made to the site zoning for the purposes of the facility and this license application.

3. Operational Process Inputs/Outputs

	Process Inputs 2013	Process Inputs 2014
Steel Purchases	26,381 Tons	16,562 Tons
Electricity	1,492,859 kWh	1,560,477 kWh
Natural Gas	138,112 m3	197,008 m3
Diesel	162,264 litres	181,093 litres
Gasoline	24,589 litres	23,821 litres
Nitrogen	76,674 m3	57,505 m3
Oxygen	40,884 m3	31,543 m3
Argon	125 m3	94 m3
Propane	5,028 Lbs	4,023 Lbs
Acetylene	77 m3	58 m3
	Process Outputs 2013	Process Outputs 2014
Steel Shipments	23,721 Tons	16,995 Tons
Scrap Steel	1,025 Tons	820 Tons
Garbage	40 Tons	40 Tons

4. Potential Impacts of the Facility

a. Location

The site's physical presence displaces the natural environment and its associated plants and wildlife. The site, in isolation, has minimal environmental impact as it provides low quality habitat. The site is located within the RM of Springfield's zoned industrial land and is surrounded on all 4 sides by industrial development.

The site is maintained to provide minimal attraction to birds and animals thereby preventing human activity-wildlife conflict such as animal migration across roads and highways to the site. There is no standing water, potential food source or cover habitat to attract wildlife. All site waste is secured in containers and removed on a minimum weekly basis by contracted waste companies.

b. Air Quality

Brunswick Steel monitors interior air quality conditions through an exterior consulting company and ambient air quality meets Workplace Health and Safety standards. Brunswick Steel is unaware of any other significant air pollution created by its operations.

c. Water

Brunswick Steel has taken reasonable measures to prevent potential impacts to surface and ground water from its operations. All floor drains are for drive thru truck traffic and get pumped out by an outside contractor as required. There is 1 ground water well on the site that supplies all drinking water for the facility. The water gets tested annually by an outside contractor. Rain and snow melt runoff are directed to the RM of Springfield's storm water drainage system (ditches).

d. Wastewater

Non-process wastewater generated from toilets, lunch rooms and janitorial sinks is held on-site in a holding tank and then removed from site minimum weekly by an outside contractor.

e. Waste

Brunswick Steel generated approximately 860 tons of waste in 2014. This waste is composed of 820 tons of raw steel scrap and 40 tons of packaging materials, general office waste and cafeteria waste. Brunswick Steel recycles all scrap steel and approximately 10-20% of other waste. Recycled material includes scrap metal, paper, cardboard, plastics, glass and e-waste. Recycled e-waste, metals and paper are directed to licensed private recyclers. Remaining nonhazardous solid human waste is pumped from the storage tank and disposed of by an outside contractor. Brunswick Steel strives to continually improve upon its current processes to make a more efficient and environmentally-friendly business. Brunswick Steel uses the most efficient nesting software program currently available in order to minimize steel scrap waste. In 2015 Brunswick Steel estimates that steel scrap will be diminished even more as a new sales effort targets approximately 15% of this scrap as saleable items.

f. Green House Gas Emissions

Brunswick Steel operations emitted approximately 786 (diesel + gas + natural gas) tCO2eq in 2013 and 954 (diesel + gas + natural gas) tCO2eq in 2014. These emissions are calculated from site electricity and natural gas consumption using CO2 emission factors. Natural gas combustion in the facility heating units is the main source of CO2 emissions. Electricity used for equipment, controls and lighting, is purchased from Manitoba Hydro and is assumed to be almost exclusively generated by hydroelectric means.

Brunswick Steel operates 13 fleet vehicles, 1 diesel powered loader for snow clearing and 1 diesel forklift for handling materials. The CO2 contribution of these vehicles is accounted for in the above emissions calculations. The contractor vehicle emissions for incoming freight and customer pick-ups are not included in this application. Brunswick Steel is committed to reducing its greenhouse gas footprint and is continually improving operations to reduce GHG emissions through Continuous Improvement Initiatives.

g. Odour

The manufacturing process is conducted in a closed system and emissions pass through a dust collection and filtering system to capture particulate matter. Brunswick Steel is unaware of any odour complaints regarding the site.

h. Noise

Noise produced at the site is compatible with industrial zoning. All industrial processes are within the site's buildings and are typically not audible to the outside environment. The dust collection system from the manufacturing process produces intermittent sound outdoors. It is possible that on occasion that industrial sound from inside the building can be heard outside while traffic moves into or out of the building. Tractor trailer traffic, site snow clearing, outside crane and forklift activity produce the highest levels of sound. Delivery activity is generally conducted during daytime hours, Monday to Friday. Occasional snow removal and forklift operation are the only significant night time noise generation from site operations.

Brunswick Steel takes noise samples from various work areas throughout the year as part of our ongoing Safety and Health initiatives. We are unaware of any excessive noise being caused by the manufacturing process.

i. Light

The site maintains site lighting consistent with an industrial facility. There are building mounted lamps to provide safety and security lighting around the perimeter of the building. There are additional lamps in the outside crane way to allow afternoon order pickers to retrieve materials for loading trucks and a lamp at the entrance of the facility on Bismarck Street for security purposes.

j. Storage of Hazardous Materials

Brunswick Steel stores hazardous materials on sight in accordance with Workplace Health and Safety and environmental regulations. Compressed gases are stored outside and secured in the upright position. Smaller quantities of cleaning solutions and similar liquids are stored in accordance with Workplace Health and Safety regulations. For Public Release

k. Ozone Depleting Compounds (ODCs)

Brunswick Steel is unaware of any Ozone Depleting Compounds (ODCs) that are produced or released as a result of its manufacturing operations.

5. Mitigation Measures and Residual Environmental Effects

Brunswick Steel incorporates into their operations a management system that provides the framework to reduce and mitigate impacts on the environment. Protection of the environment is built into standard operating procedures (SOPs) for normal operation, start-up, shutdown, emergency situations and waste handling. Brunswick Steel's environmental management practices place emphasis on prevention and incorporates continuous improvement in operational equipment and processes.

a. Spill and Emergency Management

Brunswick Steel strives to create a safe and environmentally-friendly facility by identifying dangerous products, foreseeing potential hazards and taking appropriate measures to mitigate the risk of an environmental occurrence. The analysis of potential hazards leads to the creation of policies and standard operating procedures that ensure safe operating practices. These policies are focussed on minimizing danger to human life, while containing and properly managing any dangerous situations. Since Brunswick Steel does not use liquids in the manufacturing process the chance of any sort of chemical spill is very low. As part of the companies Safety & Health Policy there is a policy in place for dealing with such situations if they ever did arise.

b. Pollution Control Equipment

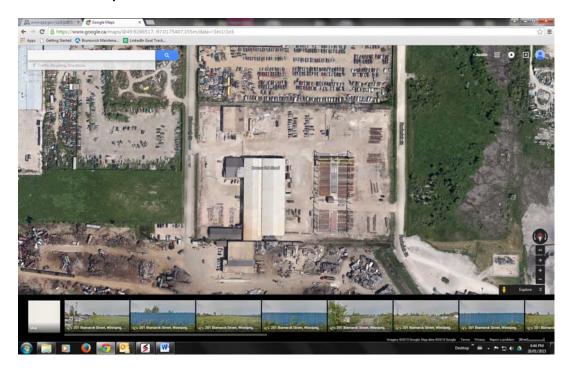
Within the facilities, 4 dust collectors are used in the ventilation exhaust system. The dust collectors are designed to filter out particulates prior to exhausting and/or recirculating the air and are machine specific. The dust collectors are on a regular preventative maintenance schedule. The systems are cleaned and verified on a regular basis. The collected steel dust is disposed of and partly re-used in the steel making process.

Brunswick Steel produces less than 1,000 tonnes of Green House Gas (GHG) emissions per annum, which is well below the 50,000 tonne mark for GHG reporting for Environment Canada regulations. Brunswick Steel maintains acceptable ambient indoor air quality and does not exhaust any other harmful substances exterior to the facility. Brunswick Steel uses outside contractors to perform ambient and 'at-source' air quality tests and the results were acceptable according to Manitoba Workplace Health and Safety standards.

6. Monitoring and Reporting

Brunswick Steel is committed to having a safe and environmentally friendly facility. Air quality and interior sound level testing is conducted on an annual basis in conjunction with Manitoba Health and Safety. The results from these tests are evaluated and used to determine whether improvements are required to improve workplace safety or environmental conditions.

7. Site Map



8. References

- RM of Springfield, January 2014
- carbonzero.ca
- Environment Canada, Jan 2014 (accessed). Canadian Climate Normals (1971-2000) Winnipeg
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- Facility Greenhouse Gas Emissions Reporting Program: Technical Guidance on Reporting Greenhouse Gas Emissions. Government of Canada.
- Geological Survey of Canada, Manitoba Minerals Division. 1987. Geological Highway Map of Manitoba.
- Manitoba Conservation and Water Stewardship. Dec 2013 (accessed). Parks and Natural Areas, Parks, Birds Hill Provincial Park. Manitoba Conservation and Water Stewardship Website:https://www.gov.mb.ca/conservation/parks/popular_parks/eastern/malo.html
- Manitoba Water Stewardship, Groundwater Management Section. 2013. GWdrill. Government of Manitoba, Winnipeg.

COPP HOLDINGS CO LTD

125 Bismarck Street Box 6 Group 525 RR5 Winnipeg Manitoba R2C 2Z2 204-224-1472

June 1, 2015

Please note that Brunswick Steel is authorized to operate at 125 Bismarck Street which is property owned by Copp Holdings Co Ltd.

Sincerely,

Christine Dockter

Corporate Officer

Cerl. No. G 9365

UNDER THE REAL PROPERTY ACT

COPP HOLDINGS CO. LTD.

now seized of an estate in fee simple in possession subject to such encumbrances, liens and interests-as are notified by memorandum underwritten (or endorsed hereon) in all that piece or parcel of land known and described as follows,

Firstly: Lots One to Sixty-two, both inclusive, in Block Four, which lots are shewn on a plan of survey of part of the North West Quarter of Section 17-11-4 East, in Manitoba, registered in the Winnipeg Land Titles Office, as No. 2043. Secondly: All that portion of the said North West Quarter taken for a public lane in Block Four, which lane and block are shewn on said plan No. 2043, (now closed) and shewn as Parcel Three, on a plan filed in the said office, as No. 14038, excepting out of the land secondly above described all mines and minerals.

Certificate of Consent under the City of Winnippa Act required for any dealing, with any part hereof. Pylos. Plan No. 212 declared and a slought subdiction under the city of ramining that The Pin Research under the tity in transfers

INST TYPE: E/REW.

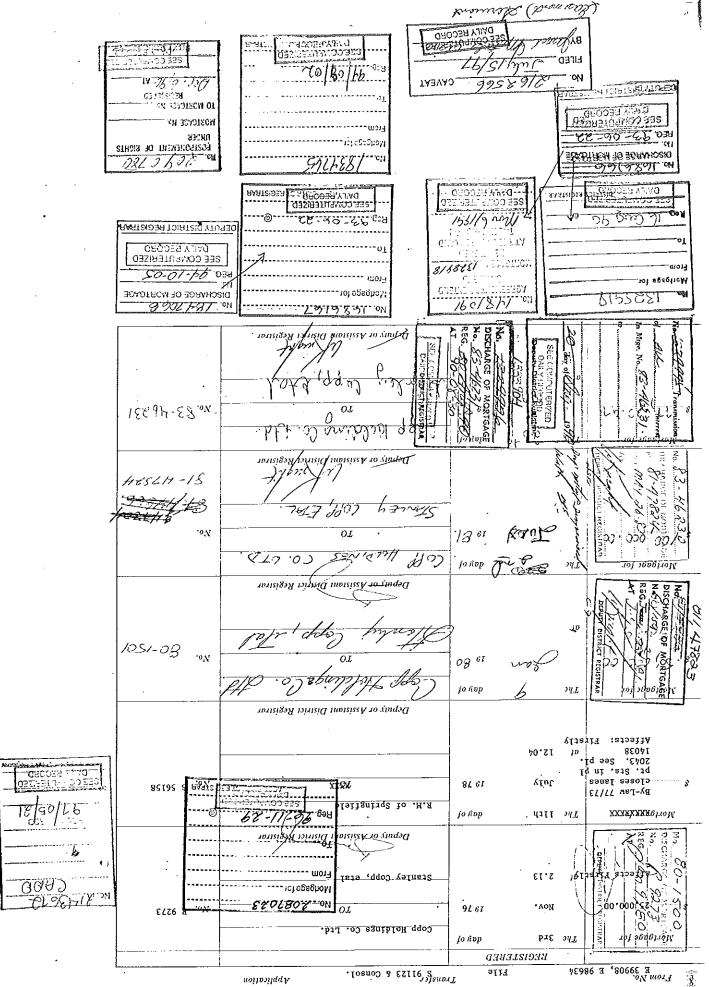
IN WITNESS WHEREOF I have hereunto signed my name and affixed my Seal of office this day of November Ninth

One thousand nine hundred and seventy - eight

Signed in the presence of

Deputy or Assistant District Registrar Gor Winnipeg

nd occupation, of and rightly entitled, to the land at the time it was brought under



Form No. Re-1358