Price Industries Limited
priceindustries.com
638 Raleigh Street, Winnipeg, MB R2K 3Z9 CAN
Phone: (204) 669.4220 | **Fax:** (204) 663.2715

July 17, 2015

Director
Environmental Approvals Branch
Manitoba Conservation and Water Stewardship
Suite 160, 123 Main Street, Box 80
Winnipeg, Manitoba R3C 1A5

RE: Environmental Act Proposal Form

Dear Tracey Braun,

Price Industries received a letter from Marguerite Reimer, Environment Officer with the Environmental Compliance and Enforcement department stating that Price Industries is considered a Class 1 Development under the *Classes of Development Regulation* M.R. 164/88 and as such would require a license under *The Environment Act*. To that end please find enclosed the following:

1) The Environment Act Proposal Form.
2) A $1,000 check to the Minister of Finance for the Class 1 Developments application fee.
3) One CD containing an electronic version of Price Industries Environment Act Proposal.
4) Four hard copies of Price Industries Environment Act Proposal.

Please do not hesitate to contact me if you would like more information regarding this application. I can be reached at 204-654-8560 or by e-mail at MauriceA@priceindustries.com.

Yours truly,

Maurice Arnaud,

Manufacturing Engineering Manager

Environment Act Proposal Form

Manitoba
Conservation and Water Stewardship

Name of the development: Price Industries Limited	
Type of development per Classes of Development Regulation (Manitoba Regulation 164/88): Class 1	
Legal name of the applicant: Price Industries Limited	
Mailing address of the applicant: 638 Raleigh Street, Winnipeg, Manitoba, R2K 2V2	
Contact Person: Maurice Arnaud	
City: Winnipeg	Province: MB — Postal Code: R2K 2V2
Phone Number: 204-654-8560	Fax: — email: MauriceA@priceind
Location of the development: 638 Raleigh Street, Winnipeg, Manitoba, R2K 2V2	
Contact Person: Maurice Arnaud	
Street Address: 638 Raleigh	
Legal Description: Price Industries Limited	
City/Town: Winnipeg	Province: MB — Postal Code: R2K 2V2
Phone Number: 204-654-8560	Fax: — email: MauriceA@priceind
Name of proponent contact person for purposes of the environmental assessment: Maurice Arnaud	
Phone: 204-654-8560 Fax:	Mailing address: 638 Raleigh Street, Winnipeg, Manitoba, R2K 2V2
Email address: MauriceA@priceindustries.com	
Webpage address: www.priceindustries.com	
Date: July 17, 2015	Signature of proponent, or corporate principal of corporate proponent: Printed name: Maurice Arnaud

A complete **Environment Act Proposal (EAP)** consists of the following components:

- **Cover letter**
- **Environment Act Proposal Form**
- **Reports/plans supporting the EAP** (see "Information Bulletin - Environment Act Proposal Report Guidelines" for required information and number of copies)
- **Application fee** (Cheque, payable to Minister of Finance, for the appropriate fee)

Per Environment Act Fees Regulation (Manitoba Regulation 168/96):	
Class 1 Developments	$1,000
Class 2 Developments	$7,500
Class 3 Developments:	
Transportation and Transmission Lines	$10,000
Water Developments	$60,000
Energy and Mining	$120,000

Submit the complete EAP to:

Director
Environmental Approvals Branch
Manitoba Conservation and Water Stewardship
Suite 160, 123 Main Street
Winnipeg, Manitoba R3C 1A5

For more information:
Phone: (204) 945-8321
Fax: (204) 945-5229
http://www.gov.mb.ca/conservation/eal

WINNIPEG Air Testing

Practical Health and Safety Solutions

121 Keedian Drive, East St. Paul, MB R2E 0K3
Phone (204) 668-3141 Fax (204) 654-9583
Email: winnipegairtesting@shaw.ca

Environmental License

Technical Support

The environmental assessment was performed by Winnipeg Air Testing under Mr. Doug Wylie. Mr. Wylie has some 30 years of experience in health and safety in Manitoba. Mr. Wylie is a Certified Industrial Hygienist, a Registered Occupational Hygienist, a Canadian Registered Safety Professional and hold the designation of Canadian Risk Manager.

Executive Summary

The facility in question is a large manufacturing facility located in an industrial area. The facility comprises 2 main buildings. Industrial processes include welding, spray painting, powder coating and dip tanks. An environmental assessment was performed including assessing the various processes, identifying and measuring emissions from these processes and measurements downwind of the plant. The study found that there are no significant emissions to the environment and that current practices to protect the environment will continue.

Introduction and Background

Price Industries has been supplying air distribution components for over 60 years (heating, ventilating & air conditioning equipment & devices, exhaust fans and ceiling systems) for commercial, industrial and institutional buildings. The company employs approximately 800 employees.

Description of Development

The facility consists of two buildings – one located on Raleigh street and a second building adjacent to the first on Golspie street. The Raleigh building is a 220,000 square foot building which includes an administrative office facing east towards Raleigh street and a fabrication facility on the west end of the building. The Golspie building is 100,000 square feet which includes office space and a production area.

Description of Environment and Environmental Effects

638 Raleigh Status of Title

STATUS OF TITLE

Title Number **2524630/1**
Title Status **Accepted**
Client File PRICE

The Property Registry
A Service Provider for the Province of Manitoba

1. **REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION**

PRICE INDUSTRIES LIMITED

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON
IN THE FOLLOWING DESCRIBED LAND:

PARCELS A, B, AND C PLAN 50853 WLTO
IN RL 89 TO 91 PARISH OF KILDONAN

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act.*

600 Golspie Status of Title (5788251 is owned by Etna (a division of Price), Price Industries in turn leases from Etna).

DATE: 2009/06/30
TIME: 22:50

MANITOBA
STATUS OF TITLE

TITLE NO: 2341831
PAGE: 1

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	CAMPBELL, MARR LLP
ORIGINATING OFFICE...	WINNIPEG	ADDRESS.....	10 DONALD ST.
REGISTERING OFFICE...	WINNIPEG		WINNIPEG MB R3C 1L5
REGISTRATION DATE....	2008/12/10		
COMPLETION DATE.....	2008/12/24	LTO BOX NO....	18
		CLIENT FILE...	09,580-2-6-6E.H.PRICE
		PRODUCED BY...	SYSTEM for Series : 3790248

LEGAL DESCRIPTION:

5788251 MANITOBA LTD.

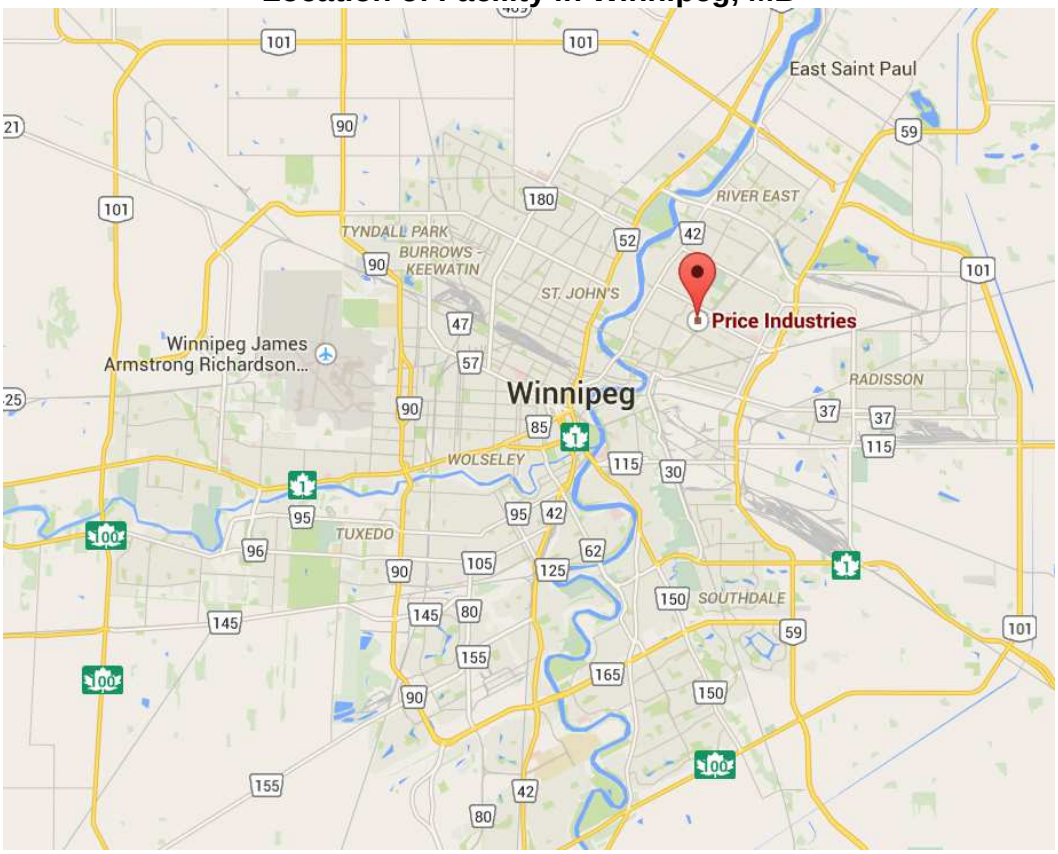
IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED
HEREON IN THE FOLLOWING DESCRIBED LAND:

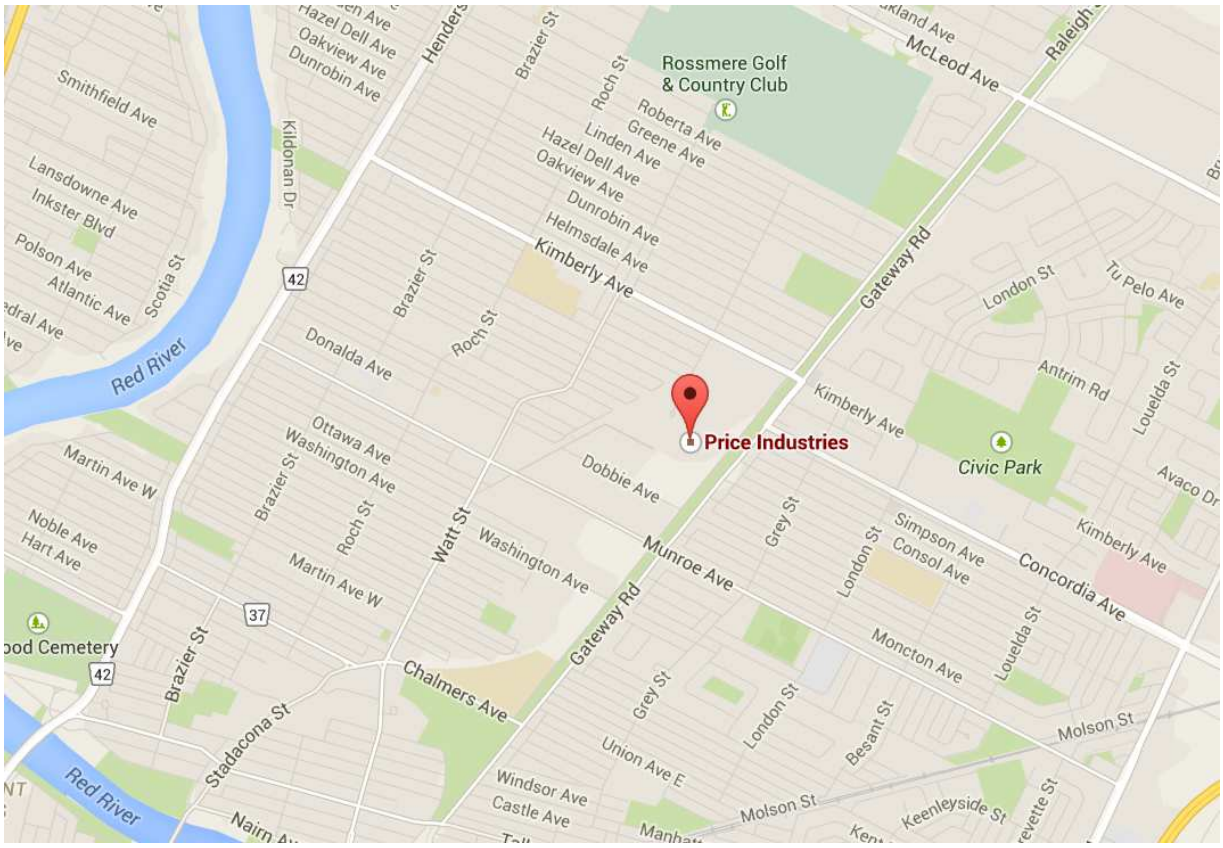
LOT 27 PLAN 6146 WLTO
IN RL 87 TO 94 PARISH OF KILDONAN

Geography and Setting

The plant is located in East Kildonan and has been at this site for over 30 years. The plant is zoned as general manufacturing and is situated in an industrial area and so is adjacent to or in close proximity to a wide selection of other companies.

Location of Facility in Winnipeg, MB



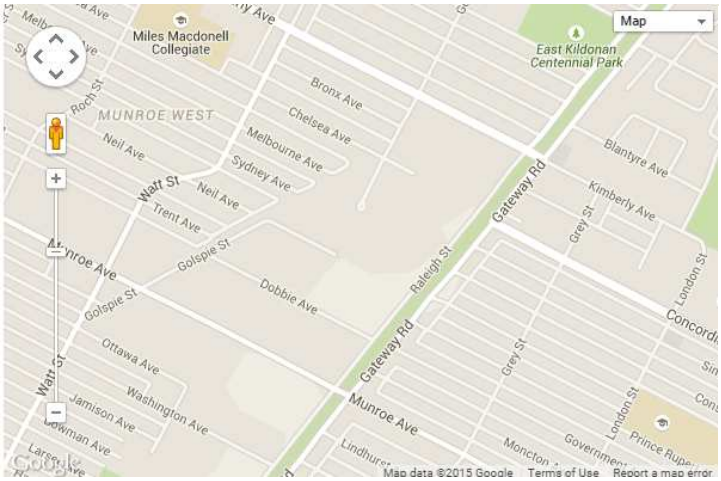


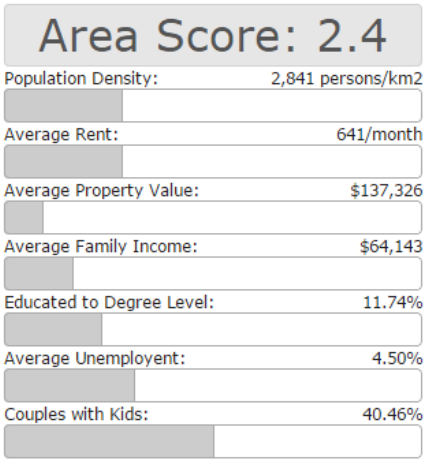
Map of Neighbourhood of Facility

Arial View of Facility
(The Raleigh building is on the right, the Golspie Building on the left)

General Population Statistics for Area

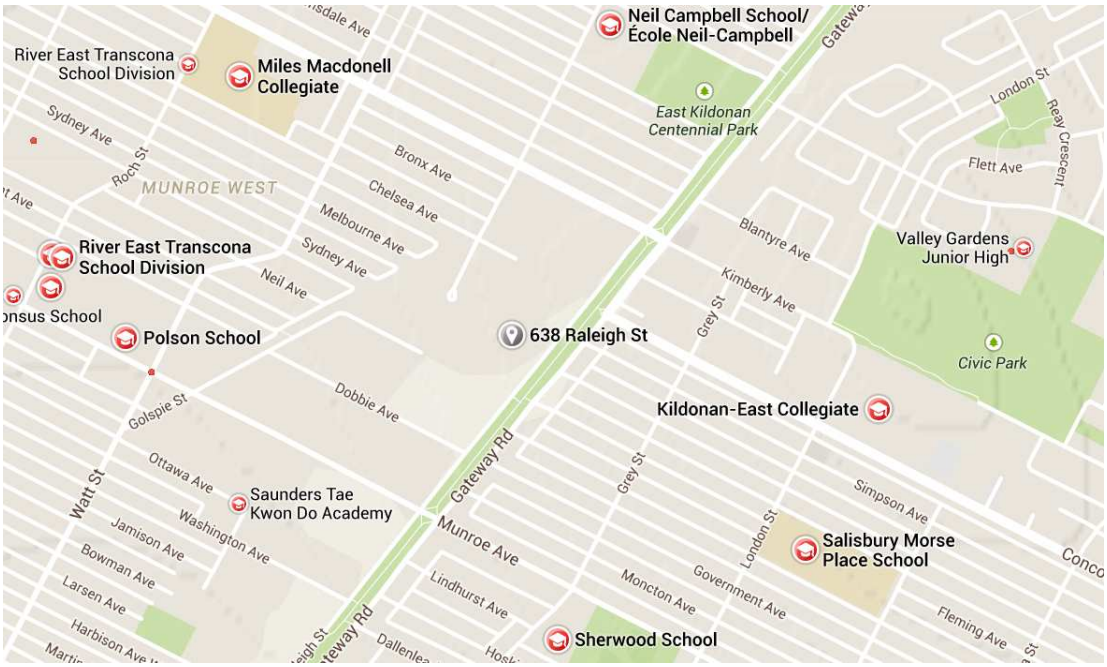
The following information provides some demographics and metrics for the part of the city that the facility is located. The information is taken from a public source often used to evaluate neighbourhoods for real estate purposes.





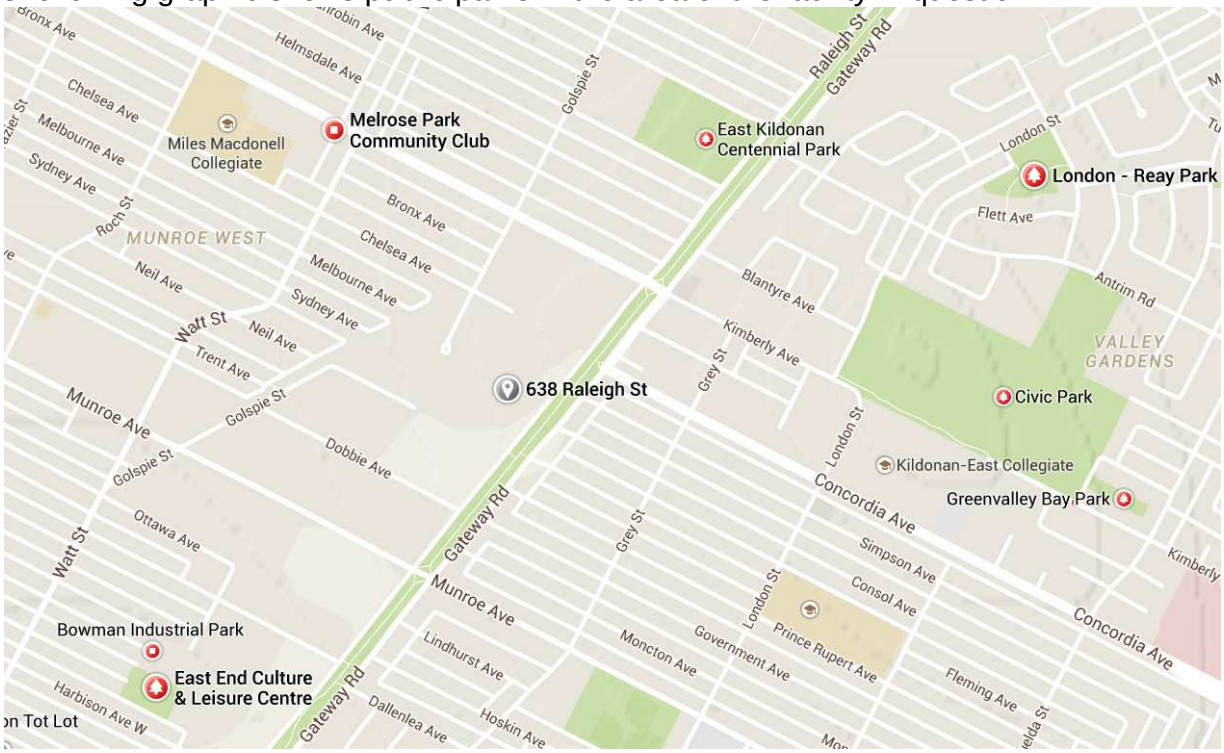
Schools in Neighbourhood

The following graphic shows the location of schools relative to the property in question.



Parks in Neighbourhood

The following graphic shows public parks in the area of the facility in question.



Nearby Businesses

The facility is located in an industrial area. There are approximately 25 companies in the immediate area of the facility including auto body shops, printing companies and window manufacturers. Below is a partial list of companies in the immediate area of the facility in question.

1. Polar Windows (window manufacturing)
2. Gateway Autobody (autobody shop)
3. Cascades (printing and packaging company)
4. EcoGreen (lawn care company)
5. A1 Power Doors (door manufacturer/installer)
6. Builders Furniture (furniture manufacturer)
7. Citicarb (car repair)
8. Redline Graphics (sign and banner printing)
9. Autoline Products (remanufacturer and distributor of car products)
10. LV Control Manufacturing Ltd (electrical distribution equipment)
11. Standard Manufacturers (metals casting)
12. Royals Sports – retail
13. Techair (refrigeration and air conditioning servicing)
14. Wilson Auto Electic (automotive products)
15. Badda Bing Party bus (transportation for events)

16. Fast Track Construction (construction and general contractor company)
17. Abesco Limited (service for the structural steel industry)
18. Richter Construction (construction company)
19. Secure Firestop (fire stop and smoke seal products)
20. JW Enterprises (furniture dealers)
21. A and D Contracting (home renovations)
22. Kennedy Renovations (home renovations)
23. Imagine Windows and Siding (window and siding manufacturing)
24. Cleaning Floor Specialists
25. Jeldwenn Windows (window manufacturing)

Existing and Adjacent Land Use

The land use designation is zoned F3 M2 General Manufacturing.

Mineral Rights

The owner of mineral rights beneath 638 Raleigh and 600 Golspie is not explicitly noted on the Certificate of Title and therefore is assumed to be as the land owner.

Physiographic Setting

The facility is located within the Winnipeg Ecodistrict which occupies most of the southeastern portion of the Lake Manitoba Plain Ecoregion. It extends from the Canada-US border to about 50 degrees 30 seconds north. The ecodistrict has a cool, sub humid to humid, Boreal to a moderately cold, sub humid, Cryoboreal soil climate. This ecodistrict is in the most humid subdivision of the Grassland Transition Ecoclimatic Region in southern Manitoba and is characterized by short, warm summers and long, cold winters.

Climate

Based on climate data for Winnipeg (at the airport) from 1981 to 2010 the mean daily temperature ranges from 19.7 °C in July to -16.4 °C in January with an annual mean of 3.0 °C and 252 days with the daily maximum temperature above 0 °C (4). The mean annual precipitation is approximately 521 mm of which 418.9 mm falls as rain. Precipitation varies from year to year and is highest from late spring through summer. June has the highest average rainfall (90.0 mm) and January has the highest average snowfall (23.7 cm).

Geology

The Winnipeg area is underlain by unconsolidated glacial sediments averaging 18 m in thickness. These deposits include a lower till layer averaging 6 m thick, a silty clay layer typically 9 m to 12 m thick and in some regions a surface complex zone from 1 m to 4.5 m thick. Surficial deposits are underlain by Paleozoic limestone and dolomites of the Red River Formation.

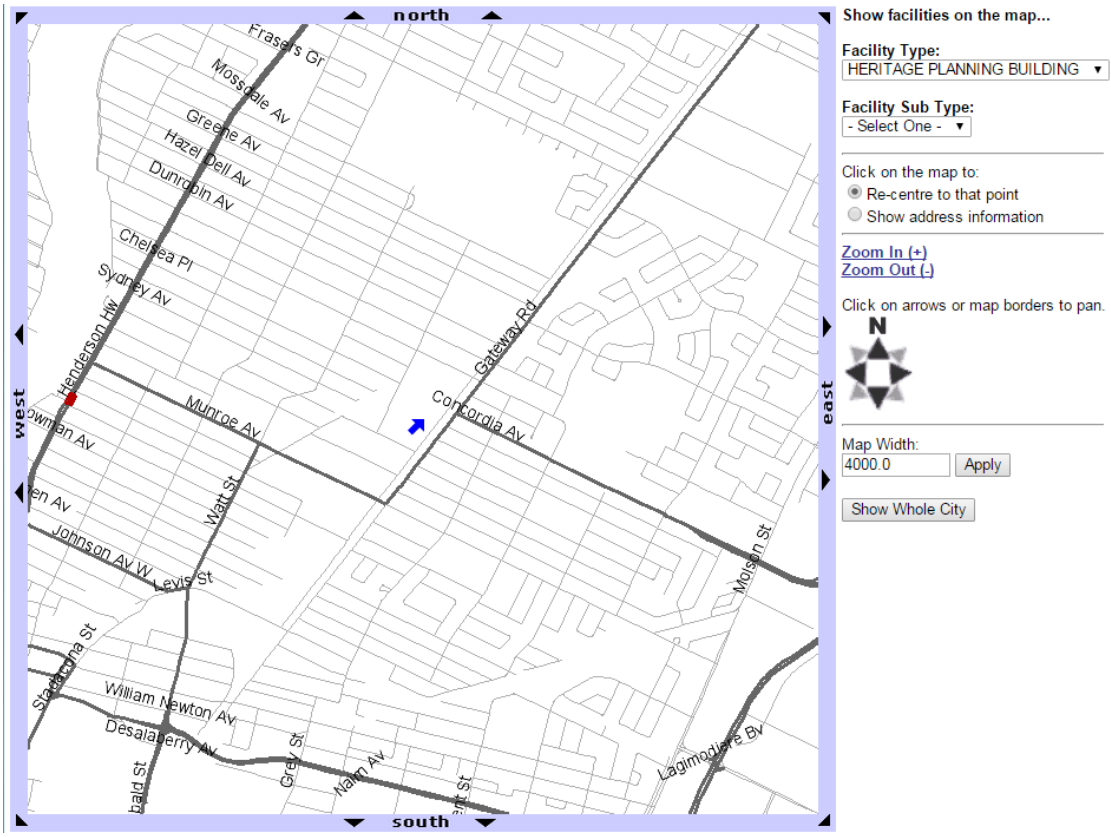
Wildlife, Habitat and Vegetation

The facility is located in the City of Winnipeg. The property is primarily covered with buildings and paved parking lots. Some landscaping involving grass and trees is also located on the property.

There are no known rare species on and around the property. In addition, there are no known occurrences of federally or provincially listed species in the area.

Heritage Sites

There are no known heritage sites in the immediate area. The following graphic is a map of the greater area of the facility in question. No Heritage Planning buildings are known to be in the immediate area of the facility.

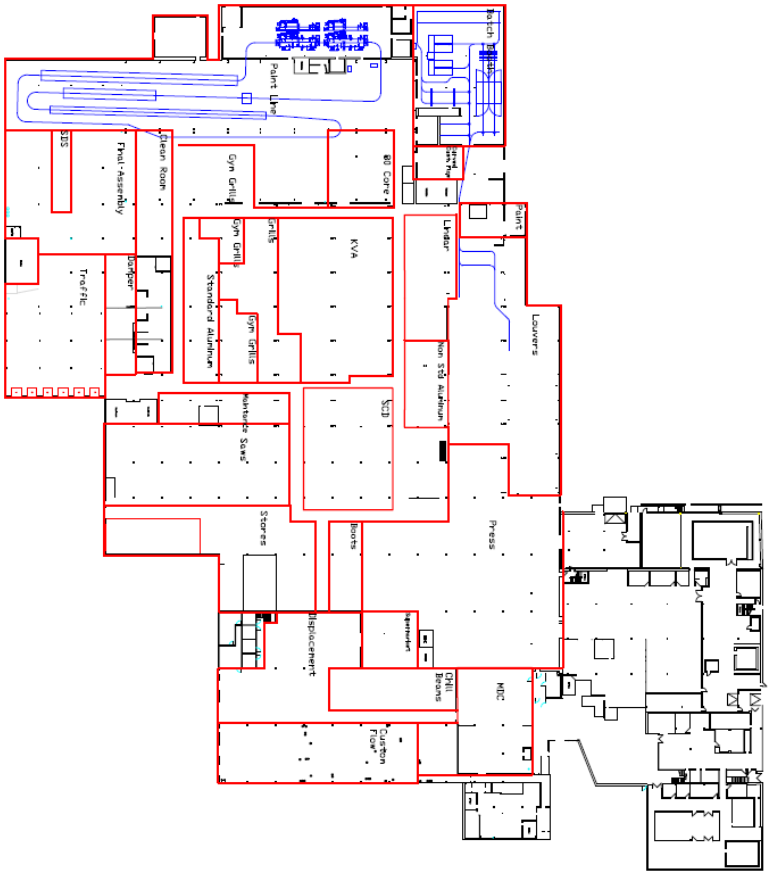


Surface Water

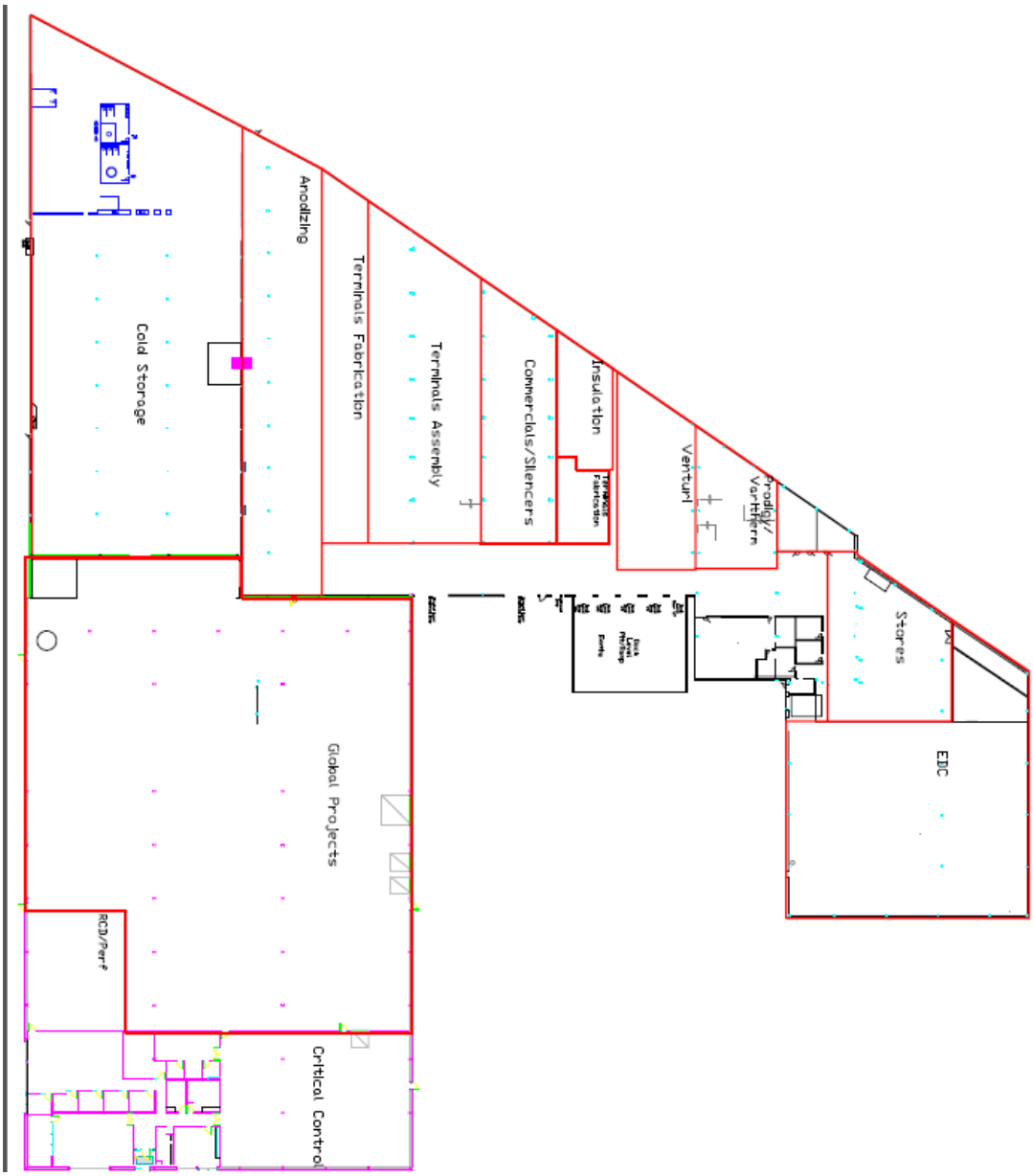
There is no significant surface water or standing water on or around the property. The Red River is located approximately 1 kilometer to the west of the property.

Description of Plant and Processes

A floorplan of the Raleigh building is provided below. This building encloses the majority of the main processes including welding, spray booths and powder coat application.



The floorplan of the Golspie Building is provided below. The building houses the anodizing line and some welding activities.



The facility performs a number of common industrial processes. The individual significant processes are provided below.

Fabrication

Material is cut with a laser or run through a number of different types of press to trim and/or bend the metal. The area produces metal dust from the laser as well as some scrap metal. Both by-products are recycled.

Welding

Welding is done throughout both buildings in various departments. Both MIG and TIG welding are performed. Total welding wire purchased in 2014 was 1,900 kg. The welding fumes are collected using local collection systems. The welding fumes are then filtered and the air vented back into the plant. Thus, there is no release of welding fumes or welding exhaust from the building. The collected welding fume is recycled. This collection and filtration system provides both energy efficiency for the plant and prevents any emissions of welding fume from the plant.

Maintenance Department

Department is responsible for the maintenance of repair of various machines and equipment inside the plant. There is a limited amount of hydraulic fluid and lubricant waste generated by this department. The amounts of oil or hydraulic oil collected by this department are minimal. Such amounts of these materials that are collected are disposed of through a hazardous waste company.

Louvers

The Louvers Department has several processes. Materials are dipped in tanks to prep the metal. These are small dip tanks and are not seen as a significant process. The items are then spray painted in one of two booths and the products are then dried in an oven. The paint used in the louvre line uses a solvent mixture of primarily n-butyl acetate (30-40%) with trace amounts of xylene and ethylbenzene (both 1-5%). The emissions from the spray booths were evaluated and that data is provided later in this report.

Powder Coat Line

Powder coat is a growingly popular way of coating metal products. One of the advantages of the process is that it results in much lower VOC emissions than regular paint application processes. The plant switched from regular paint application to powder coat for quality reasons. However, another advantage of powder coat application is that it has low to no VOC emission. The annual weight of powder coat material purchased by the facility is approximately 107,000 kg, (2014 data)

Powder coatings are based on polymer resin systems, combined with curatives, pigments, leveling agents, flow modifiers, and other additives. These ingredients are melt mixed, cooled, and ground into a uniform powder similar to baking flour. A process called electrostatic spray deposition (ESD) is typically used to achieve the application of the powder coating to a metal substrate. This application method uses a spray gun, which applies an electrostatic charge to the powder particles, which are then attracted to the grounded part. There is no exhaust from the process from the building. Any overspray is collected and reused or disposed. After application of the powder coating, the parts enter a curing oven where, with the addition of heat, the coating chemically reacts to produce long molecular chains, resulting in high cross-link density. These molecular chains are very resistant to breakdown. This type of application is the most common method of applying powders.

The parts to be powder coated are cleaned, rinsed and dried prior to the application of the powder coat itself.

One of the main advantages of powder coat processes is that they have very low VOC content. Compared to conventional solvent based paints, powder coat produces 1-2% of the VOCs.

TABLE 8a. VOC REDUCTION COMPARISON[a]
(Metric Units)

	Conventional solvent	Water-borne	Higher solids	Powder
Volume solids at spray viscosity, percent[b]	33	35	60	99
Volume VOC content, percent[c d]	67	16	40	1
Actual coverage, m^2/l (m^2/kg for powder)[b e]	5.71	6.66	14.0	19.7
VOC emissions, metric tons/yr[f]	34.5	23.6	28.1	0.54

[a] Assumed 1.1×10^6 m^2 of parts coated per year.
[b] Average of values presented in Table 6a.
[c] Assumed density of solvent equals 882 g/l.
[d] Water-borne coating VOC content assumed to be 25 percent of the nonsolids portion.
[e] Based on transfer efficiencies presented in Table 6a.
[f] Control device assumed for conventional solvent coatings with overall efficiency of about 70 percent (based on capture efficiency of about 75 percent and destruction efficiency of about 95 percent). All other systems assumed to have no control device.

Source Powder Coatings Technology Update – EPA-450/3-89-99, October 1989

Black Paint Line

The Black Paint Line runs intermittently. A portion of the product line for ceiling guides is requested to be painted black for aesthetic reasons. Thus, the system runs a few hours per day. The paint line has a local exhaust system. The process is quite small and the air from the process is exhausted through a duct (approximately 1.5 square feet) as a rooftop discharge to the environment. The paint used is a solvent based product that contains xylene (15-40%), and smaller amounts of butanone (aka MEK), ethylbenzene and ethylene glycol monobutyl ether (aka 2-butoxyethanol). These are common paint /industrial products.

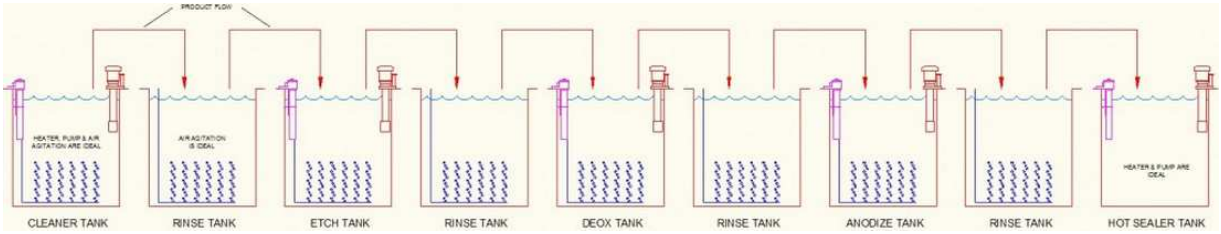
Anodizing line

By definition, anodizing is "a process to electrolytically coat a metallic surface with a protective or decorative oxide." The anodic coating consists of hydrated aluminum oxide and is considered resistant to corrosion and abrasion.

The Anodizing process begins by immersing the work in a series of solutions where various operations are performed. The solutions are held in open top tanks and the work passes through each unit. The work usually consists of distinct items that are placed on special racks and carried through the process in batches.

Material is moved from one tank to the next via an overhead crane. The work is rinsed thoroughly after each operation to avoid contamination and interference in the next solution.

Steps of an Anodizing Process



The most significant chemcials in the process are the etch stage which uses a sodium hydroxide solution and the anodizing line that uses a sulphuric acid solution. The air coming off the tanks is collected, and passed through a scrubber system prior to being discharged from roof top vents on the Golspie building.

In addition to identifying significant processes, purchases for the past year were reviewed to identify and quantify chemicals and other products that may be of concern. The information gathered is summarized below.

Solvents

The facility purchases a number of different solvents. These solvents are generally used to clean parts and equipment. The amounts purchased annually are provided in the following table.

Chemical	Annual Purchases (2014)
Methyl Ethyl Ketone	1660 kg
Toluene	2148 kg
Xylene	712 kg
Isopropyl alcohol	16 kg

Welding Wire and Metal Dust

A review of purchase invoices showed that the facility purchased approximately 1,900 kg of welding wire in 2014. The emissions from the welding processes are collected in a local collection system where the air is filtered and recirculated back into the plant. Thus, there is no discharge to the environment of welding fumes. The collected metal dust is recycled.

Discharges to the environment

The purpose of this section is to identify the various routes by which discharges to the environment occur. Controls and quantification of these discharges appears in later sections.

- Air
- Noise
- Sewer

- Hazardous Waste
- Surface Water
- Soil

Controls and Control Practices

The plant has numerous controls and practices in place to reduce or eliminate potential emissions to the environment. Some of these are indicated below.

Recycling

Material by-products of key processes are recycled to prevent materials going to the landfill. This process is currently in place for cardboard, wood from pallets and metal material.

There is a considerable amount of welding performed in both the Raleigh and Golspie plant. An extensive arrangement of local exhaust ventilation captures the welding fume at the source where it is filtered and the filtered air recirculated into the plant. The welding fumes are collected and sent out for recycling. Thus, there is no specific environmental emission from the welding processes.

The anodizing line at the Golspie plant uses both sulphuric acid and sodium hydroxide. These tanks are equipped with local ventilation systems that capture the emissions directly above the surface of the tanks. The collected air is then passed through scrubber systems to reduce potential environmental emissions.

Certain devices such as sanders are equipped with filtration systems that collect the dust generated for disposal and vent back into the plant thus prevents any emissions to the ambient environment.

Amounts of Materials Recycled (2014)

Product	Amount	Recycling Company
Steel	928 net tonnes	General Scrap
Aluminum	170,000 kg	General Scrap
Steel cased battery	1150 kg	General Scrap
Stainless steel	23,000 kg	General Scrap
Wood	145 MT	Progressive Waste
Cardboard	25 MT	Progressive Waste
Sludge from anodizing line	16 MT	Progressive Waste

Other materials are collected and disposed of using a hazardous waste disposal company (Miller Environmental). The amounts of different categories of materials disposed of through Miller environmental are provided in the following table:

Amounts of Hazardous Waste Disposed (2014)

Category	Amount	Units
Corrosive Acid	68	liters
Acetic Acid	1435	liters
Alkaline Labpack	55	liters
coolant	840	liters
flammable labpack	1069	liters
Oxidizer	4	kg
Oil	1640	liters
Paint Sludge	1520	kg
Rags with Solvent	96	kg
Solvent	4715	liters
Water soluble oil (coolant)	1230	liters

Existing Data of Discharges

Air testing

Air monitoring was performed to assess air discharges to the environment. The monitoring performed consists of 2 types: a) stack or point of emission samples, and b) downwind area samples.

Point of Emission Testing

Individual processes that have the potential to have significant emission to the environment were measured. To assess emitted source concentrations, air testing was performed in the exhaust ventilation itself so as to measure the concentration prior to mixing and dilution with the ambient environment.

Processes included in source concentration testing include the following:

- The anodizing line at the Golspie plant has a local exhaust ventilation system to capture emissions coming off of the dip tank that contains a solution of sulphuric acid (15-20% H_2SO_4). Sampling was performed to measure the concentration exhausted. It should be noted that the system has scrubbers and that the test location was downstream of the scrubbers so as to provide a true measurement of source concentration.
- The anodizing line also has a tank that contains a mild sodium hydroxide solution (6.5% NaOH). This tank also has a local exhaust system and a scrubber system. Sampling was performed downstream of the scrubber so as to provide a true measurement of source concentration.
- Louvre paint booths in the Raleigh building. The louvre section uses two paint booths where components are spray-painted. The exhaust from the paint booths is not

treated. There is a filter bed across the end of the booth to prevent mist or droplets of paints but no means of reducing or controlling the solvent or VOC emissions. The Material Safety Data Sheet was used to identify the carrier component of the paint.

- The Black Paint Line in the Raleigh building is run intermittently to paint components black. The Material Safety Data Sheet was used to identify the carrier component of the paint.

Stack Emissions Concentrations

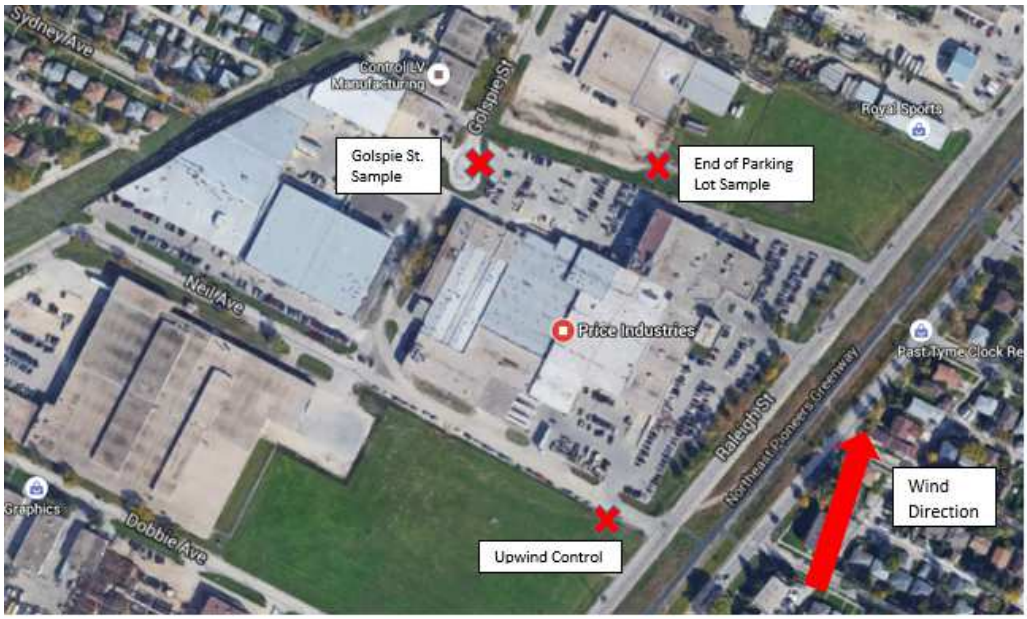
Location	Compound	Concentration
Anodizing Line - Golspie	Sulphuric Acid	<0.134 mg/m3 (<0.03ppm)
Anodizing Line - Golspie	Sodium Hydroxide	0.13 mg/m3
Louvre Paint Booth	n-butyl acetate	32.5 mg/m3 (7 ppm)
Black Paint Line	Xylene	57 mg/m3 (13 ppm)
Black Paint Line	Ethylbenzene	16 mg/m3 (3.7 ppm)

Downwind VOC Testing

Volatile Organic Compounds (VOC) were tested downwind of the plant. As the Raleigh plant contains the Louvre paint booths, the black paint line and the powder coat operation, that building would represent the dominant source of VOCs. The Golspie building does not have any significant VOC-related sources.

The testing was performed by drawing air through thermal desorption tubes. A tri-matrix tube (three different sampling media in the tube) allows the sample to collect polar and nonpolar chemicals.

Two locations were tested downwind of the Raleigh building as it is difficult to anticipate wind direction. Samples were collected for a period of approximately one hour starting at 2 PM on June 15, 2015, when the facility was running at full production to represent the worst case scenario. The VOC scan used provides a) a total VOC value, b) a VOC by chemical product type, and c) identifies /quantifies specific compounds.



Total VOC Levels

Sampling was performed at a location upwind of the plant and two locations downwind of the plant. The report gives both a total VOC number as well as a breakdown by VOC Product Categories. The total VOC results and summation of VOCs by major category are summarized in the following table.

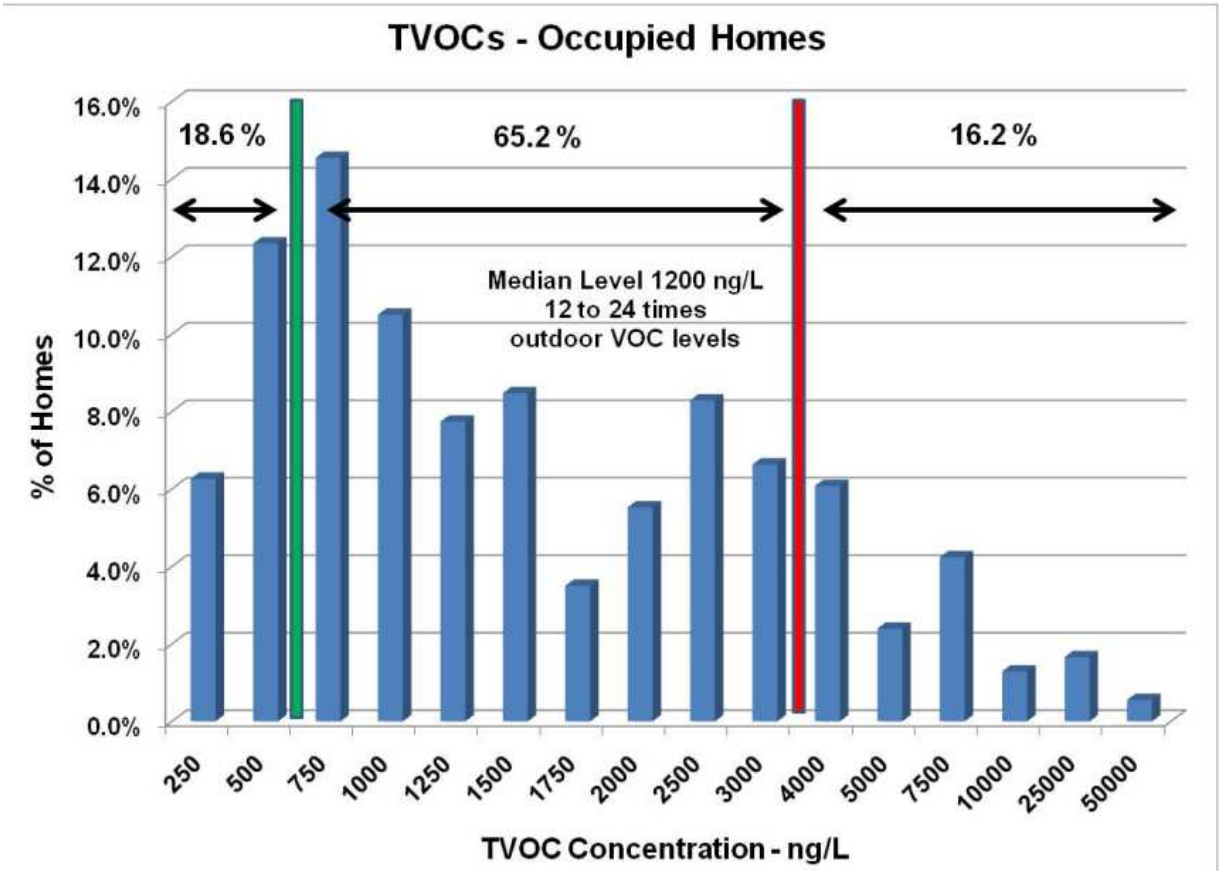
Downwind VOC levels (mg/m^3)

VOC parameter	Upwind	Parking Lot	Golspie
Total VOC	< 0.200	0.540	<0.200
Sum of Categories	0.068	0.384	0.163

There are no ambient air quality guidelines for Total VOCs. Health Canada recommends <1 mg/m^3 as a goal for office environments with >5 mg/m^3 as an action level. As a point of reference, the indoor environment in the investigator's home (located outside of the city in East St. Paul) was tested in the same manner and was 0.5 mg/m^3.

Most reported TVOC-concentrations in non-industrial indoor environments are below 1 mg/m^3 and few exceed 25 mg/m^3. Over this range the likelihood of sensory effects increases. The sensory effects include sensory irritation, dryness, and weak inflammatory irritation in eyes, nose, air ways and skin. At TVOC concentrations above 25 mg/m^3 other types of health effects become of greater concern.
Source: EUROPEAN COLLABORATIVE ACTION INDOOR AIR QUALITY & ITS IMPACT ON MAN (ECA-IAQ) Environment and Quality of Life Report No 19 Total Volatile Organic Compounds (VOC) in Indoor Air Quality Investigations.

Surveys using the same technology and laboratory analysis have been performed on a large number of occupied homes. The results are summarized in the following chart:



Source: IAQA 2011, M. L.Spartz et al.

The VOC scan also identifies specific compounds. This allows the compounds identified in the scan to be linked with specific processes from the facility. A total of six compounds were identified by the scan. Each of the 6 compounds can be linked back to industrial processes or activities at the plant at the facility. For example, the paints in both the black paint line and the Louvre paint booths uses xylene. Xylene was the product with the highest result in the downwind sampling. The concentration of xylene found in the two downwind samples ranged from 6 to 26 parts per billion (ppb).

Chemical	Concentration (ppb)			Source
	Upwind	Parking lot	Golspie	
Xylenes	--	26	6	Black paint line, Louvre spray booth, cleaning solvent
Ethylbenzene	--	5	--	Black paint line, Louvre spray booth
Toluene	--	5	--	Cleaning solvent
MEK	--	6	--	Black paint line, cleaning solvent
n-Butyl acetate	--	4	--	Louvre spray booth

2-butoxyethanol	--	2	--	Black paint line

The VOC scan also reports on a list of EPA common VOCs of concern. The following is the results of the VOC scan from the Parking Lot (the highest result of the two downwind samples). Other than the specific process products mentioned above (toluene, xylenes and ethylbenzene), no other VOCs on this list were detected.

Compound	CAS	Estimated VOC Level (ng/L)	Estimated VOC Level (ppb)	NIOSH Exposure Limit
Carbonyl sulfide	463-58-1	< 1	< 0.4	None Listed
Carbon disulfide	75-15-0	< 1	< 0.3	3,000 ng/L (1,000 ppb)
Methylene Chloride	75-09-2	< 1	< 0.3	Carcinogen
Hexane (C 6)	110-54-3	< 1	< 0.3	180,000 ng/L (50,000 ppb)
1,1,1-Trichloroethane	71-55-6	< 1	< 0.2	C; 1,900,000 ng/L (350,000 ppb)
Benzene	71-43-2	< 1	< 0.3	320 ng/L (100 ppb)
1,2-Dichloroethane	107-06-2	< 1	< 0.2	Carcinogen; 4,000 ng/L (1,000 ppb)
Trichloroethene	79-01-6	< 1	< 0.2	Carcinogen
Methyl methacrylate	80-62-6	< 1	< 0.3	410,000 ng/L (100,000 ppb)
Toluene	108-88-3	20	5	375,000 ng/L (100,000 ppb)
Tetrachloroethene	127-18-4	< 1	< 0.1	Carcinogen
Ethylbenzene	100-41-4	22	5	435,000 ng/L (100,000 ppb)
m,p-Xylene	108-38-3; 106-42-3	84	19	435,000 ng/L (100,000 ppb)
o-Xylene	95-47-6	32	7	435,000 ng/L (100,000 ppb)
Styrene	100-42-5	< 1	< 0.2	215,000 ng/L (50,000 ppb)
1,4-Dichlorobenzene	106-46-7	< 1	< 0.2	Carcinogen
Naphthalene	91-20-3	< 1	< 0.2	50,000 ng/L (10,000 ppb)

Comparison of Data to Relevant Exposure Guidelines

The sampling data, both source and downwind results, are compared to allowable airborne exposure limits. The table includes 2 types of exposure limits. The first is the ACGIH TLV. This is an airborne exposure limit that is believed a normal healthy worker can be exposed, 8 hours per day, 40 hours per week without adverse effect. The second criteria is an ambient air quality criteria set or adopted by the Province of Manitoba. These are guidelines for acceptable airborne concentrations to which the general public can be exposed. The units have been harmonized to allow for an easier comparison with the different guidelines.

Comparison Sampling Data to Air Criteria

Substance	TLV	MB Ambient	Stack Source	Downwind	Units
Sulphuric Acid	200	100	<134	N/AV	ug/m3
Sodium Hydroxide	2000 ceiling	No criteria	130	N/AV	ug/m3
n-butyl acetate	150,000	No criteria	6845 (32,518)	4 (1 hr)	ppb (ug/m3)
Xylene	100,000	No criteria	13,052 (56671)	26 (1 hr)	ppb (ug/m3)
ethylbenzene	20,000	No criteria	3,698 (16,057)	5 (1 hr)	ppb (ug/m3)

Discharge to Sewer

Some of the processes create water discharge. These discharges are modest in volume and have been tested periodically to ensure compliance with City of Winnipeg Discharge to Sewer Bylaw. Testing includes metal scans, phosphate and sulphate testing. The anodizing line is treated and is tested for total oil and grease as part of ongoing efforts to track and monitor potential emissions to the environment.

Part of the waste water treatment on site at the plant involves filtering the water to collect solids. The collected solids are tested periodically for metals leachate, pH and metals scan prior to disposal.

Collectively, these test results for the powder coat wash stage have been reviewed by the City Water and Waste Department. Based on the modest amounts and properties of the materials, WW&WD is on record stating that the company no longer needs to send in results of the ongoing testing.

The water discharge from the anodizing line is monitored with periodic water sampling protocol. Some aspects such as pH are checked daily. Other aspects such as metal content, sulphate and fluoride testing are performed on an annual basis. All tests performed to date have met the City of Winnipeg discharge to sewer by-law.

Noise Testing

Noise is often a concern with industrial facilities. Noise from exhaust stacks, equipment, etc. is typically a concern to residents. Noise testing has found the following:

Noise measurements were taken with a hand held noise meter during daytime conditions, this would be when the facility and ambient noises would be at their highest (example traffic).

- Golspie cul de sac: 70 to 74 dBA, a refrigerator unit was running outside the building and was the main source of noise in the area. No traffic was present as this is a cul de sac.
- North parking lot: 65 - 66 dBA, main source of noise was the traffic on Raleigh.
- Dobbie Ave.: 65 – 70 dBA, main source of noise was the traffic on Raleigh.

Late Night Noise Testing

Late night (10:30 – 11:30 PM was performed on July 2, 2015. The conditions were a warm summer night with little wind (5 km/hr out of the west). At this time, the community background level has not yet reached its nightly minimum. Thus, there is still some noise from the community in the form of television/radio from open windows, modest vehicular traffic on streets, etc. that add to the background hum.

Late Night Noise Mapping Around Facility

Late Night Noise Levels Around Facility

Location	Noise Level (dBA)	Dominant Noise Source
Raleigh Front Parking lot	47	Ventilation hum from Price
Neil Avenue and Raleigh	47	Ventilation hum from Price
Neil Avenue and Raleigh	57	Car Passes
Dobbie (SE corner of Cascades)	52	Machinery and ventilation from Cascades Plant
Neil (middle of road)	55	Ventilation hum
Golspie Cul de Sac	64	Chiller on north side of Raleigh building
Golspie and Chelsea	48	Chiller on north side of Raleigh building
West side of Golspie building	44	Ventilation hum
Sydney Ave	42	Ventilation hum / community noise
North edge of front lot	48	Ventilation hum from Price

Based on the late night noise measurements, the nearest residences received less than 50 dBA.

Follow-up Plans including Monitoring and Reporting

The environmental assessment, which was conducted on the main or dominant processes, did not reveal any significant emissions or discharges to the environment or significant exposures to adjacent properties. In addition, some of the testing, such as the VOC testing results, which would have included emissions from all processes, also did not reveal any significant downwind concentrations. The facility already has numerous programs in place to control emissions and reduce waste (process substitution, scrubbers, recycling, etc.). Based on the findings of the environmental impact assessment, no additional testing or control programs are indicated.

Conclusion

The environmental assessment conducted did not reveal any significant emissions or discharges to the environment or significant exposures to adjacent properties. The facility will continue with current programs to control emissions and protect the environment.

Scrap Metal Recycling Amounts 2014

General Scrap - Canadian
Supplier Product By Date
Period reported : 01 Jan 2014 to 31 Dec 2014

I.D. : 012 STR040
DATE : 13 May,2015
PAGE : 1

For Yard : General Scrap Winnipeg

Supplier	Product	Weight	Value	Cost per
EHP001 - E.H. PRICE, 638 Raleigh Street				
	BUSHELING - clips - steel	399.97	142,125.15	355.34 / NT
machine	#1 HEAVY MELT UNPREPARED STEEL	75.73	12,116.80	160.00 / NT
	CLIPS - steel	409.03	158,532.88	387.58 / NT
	SHRED - steel	44.10	16,335.59	370.42 / NT
	MILL STEEL TURNINGS - steel	.17	68.00	400.00 / NT
	ALUMINUM TURNINGS	47,301	22,143.41	.47 / LBS
	10/10 ALUMINUM EXTRUSIONS	93,567	79,492.70	.85 / LBS
	PAINTED ALUMINUM EXTRUSIONS	67,953	55,050.28	.81 / LBS
	MIXED ALUMINUM	160,432	116,393.04	.73 / LBS
	DIRTY ALUMINUM	27,888	12,549.60	.45 / LBS
	STEEL CASED BATTERY	2,522	580.06	.23 / LBS
	304 STAINLESS STEEL	49,755	28,186.64	.57 / LBS
	SUPPLIER TOTAL		643,574.15	
	TOTAL		643,574.15	

2014 Amounts of Recycled Wood and Cardboard

For roll off bins and the compactor actual weights are reported. For the recycling totes and front load bins I used our averages to estimate the weight. Averages are 45KG per yard for waste, 30KG per yard for comingle/mixed recycling, 25KG per yard for cardboard.

At 638 Raleigh:
Compacted Waste 50 lifts 145.55MT Waste + 18.62MT contaminated wood
Front Load 100 lifts approx 27MT waste
Comingle Recycling Totes 624 lifts approx 8.424MT
Front Load Comingle Recycling 53 lifts approx 6.36MT
Roll Off Wood 36 Lifts 56.4 MT Wood (2 bins)

At WEST building:
Comingle Recycling Totes 156 Lifts approx 2.106MT
Roll Off Waste 53 lifts 61.66 MT waste + 38.34MT contaminated wood
Roll Off Wood 48 lifts 32.51 MT Wood
Front Load Cardboard 125 lifts approx 25MT cardboard
Roll off Sludge 3 lifts 16.38MT

Hazardous Waste Disposal Amounts (summarized)

Category	amount	units
Corrosive Acid	68	liters
Acetic Acid	1435	liters
Alkaline Labpack	55	liters
coolant	840	liters
flammable labpack	1069	liters
Oxidizer	4	kg
Oil	1640	liters
Paint Sludge	1520	kg
Rags with Solvent	96	kg
Solvent	4715	liters
Water soluble oil (coolant)	1230	liters

Point of Emission Sampling

Sodium Hydroxide

Date Analyzed : 17-JUN-15
Report ID : 887634

Alkaline Dust as NaOH

Sample ID	Lab ID	Air Vol liter	Total ug	Conc mg/m3
PRICE ANODIZE	L348682-1	1000	130	0.13

Sampled Using NIOSH Method 7401
4 hour sample collected in discharge stack

Sulphuric Acid

East St. Paul MB R2E 0K3

DATE REPORTED: 6/19/2015

F.H Price
2469

MEDIA TYPE: SILICA GEL

Sample Location	Sample Volume (L)	Total Sulfuric acid (mg)*	Actual Exp (mg/m^3)*	Actual Exp (PPM)
H2SO4	74.40	< 0.010	< 0.134	< 0.034

NIOSH Method 7903
4 hour Sample collected in discharge stack.

N-Butyl Acetate (Louvre Paint Booth)

East St. Paul MB R2E 0K3

DATE REPORTED: 6/19/2015

F.H Price
2469

MEDIA TYPE: CHARCOAL

Sample Location	Sample Volume (L)	Total BuAc (mg)*	Actual Exp (mg/m³)*	Actual Exp (PPM)
Lourve Booth	16.80	0.546	32.518	6.845

Sampled Using NIOSH Method 1450 – 1 hour (worst case) sample

Ethylbenzene (Black Paint Line)

East St. Paul MB R2E 0K3

DATE REPORTED: 6/19/2015

F.H Price
2469

MEDIA TYPE: CHARCOAL

Sample Location	Sample Volume (L)	Total EtBz (mg)*	Actual Exp (mg/m³)*	Actual Exp (PPM)
Black Paint	7.00	0.112	16.057	3.698

Sampled Using NIOSH Method 1501 – 35 minute sample (line running continuously)

Xylene (Black Paint Line)

East St. Paul MB R2E 0K3

DATE REPORTED: 6/19/2015

F.H Price
2469

MEDIA TYPE: CHARCOAL

Sample Location	Sample Volume (L)	Total m,p-Xylene (mg)*	Actual Exp (mg/m³)*	Actual Exp (PPM)
Black Paint	7.00	0.397	56.671	13.052

Sampled Using NIOSH Method 1501 – 35 minute samples (line running continously)

City of Winnipeg Water and Waste Department Letter

Winnipeg

Water and Waste Department • Service des eaux et des déchets

September 04, 2014

MAURICE ARNAUD
PRICE INDUSTRIES LIMITED
638 RALEIGH ST
WINNIPEG MB R2K 3Z9

Document ID: IWSB-PP-568
NAICS Code: 332810

Sewer By-law No. 92/2010
Pollution Prevention Plan No Longer Required

Dear Maurice Arnaud:

Based on the analytical results from our inspection at 638 Raleigh St on August 19, 2014, we no longer require Price Industries Limited to prepare and submit Pollution Prevention Planning documents.

Analysis of the sample we collected shows that your wastewater is within the limits set out in the Schedules of the by-law. Please see the attached table for the results of our analysis.

We will continue to periodically monitor the wastewater discharges from 638 Raleigh St. If the discharges exceed any of the limits in Schedules A, B, C, and D, we will re-evaluate the requirement for Price Industries Limited to participate in the Pollution Prevention Planning Program.

Information on Pollution Prevention Planning, including form templates, is available on our website at winnipeg.ca/waterandwaste/sewage/pollutionprevention

If you have any questions, please contact one of our Pollution Prevention Program Inspectors.

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Regards,

Meghan Marsland
Supervisor, Industrial Waste Services Branch
Environmental Standards Division