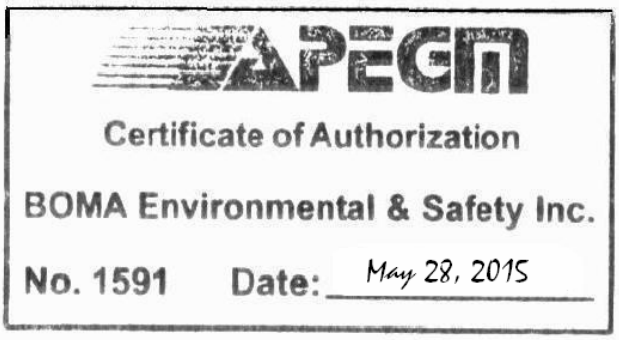
Carlson Engineered Composites Inc., Winnipeg, MB

Environmental Assessment Report

(in support of Environment Act Proposal under the Environment Act)

May, 2015



BOMA Environmental & Safety Inc.

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EXECUTIVE SUMMARY

Carlson Engineered Composites Inc. (CECI) is an established manufacturer of engineered composites, i.e. fibreglass reinforced polymers. It is submitting to Manitoba Conservation and Water Stewardship (CWS), Environmental Approvals Branch, an application for obtaining an environmental licence, in accordance with the Environment Act and environmental licensing procedure.

The environmental licensing process requires that CECI prepares and submits to CWS an environmental assessment of its operations to ensure that the CEC operates in an environmentally responsible manner.

This environmental assessment report has been prepared using the CWS's Information Bulletin – Environment Act Proposal Report Guidelines.

The report provides an overview of products and services conducted at CECI's site, provides a detailed description of the CECI's facility and manufacturing operations, describes the existing environment at the site and vicinity and analyzes potential impacts on the environment (air, water, soil, ecology) and human health.

The report concludes that CECI's operations cause no significant impact on the environment and human health.

According to its policy of due diligence in environmental, health and safety issues, CECI is committed to continuous improving of its environmental performance and reduction of air emissions and waste generation using a number of pollution prevention measures described in the report.

1. INTRODUCTION

1.1 REGULATORY REQUIREMENTS

Carlson Engineered Composites Inc., CECI, manufactures engineered composites, i.e., fibreglass reinforced polymers. As such, it is designated by the Province as a Class 1 development. (1) In order to operate, CECI must obtain a licence under the Environment Act. (2) The licensing process requires that CEC prepares and submit to Manitoba Conservation and Water Stewardship (CWS) an environmental assessment of its operation to ensure that the company operates in an environmentally responsible manner.

The approval process starts with submission of an Environment Act Proposal to the CWC's Environmental Approvals Branch. (3). The content of the proposal includes a cover letter, an Environment Act Proposal Form, a report supporting the proposal application and an application fee. The report must follow the Branch's guidelines for report preparation. (4)

1.2 PRODUCTS AND SERVICES PROVIDED

CECI manufacturers fibreglass composites using various molding processes, primarily open mold with mechanical atomization of resin/gelcoat and light resin transfer molding (LRTM), a closed molding process, in an approximate ratio of 50%:50%. The products are designed for use by original equipment manufacturers (OEMs) of agricultural equipment and transportation. (5)

The company operates 24-h/d, five days a week. Currently, it employs approximately 230 workers.

The 2014 annual throughput was 167,889 parts.

In addition to manufacturing products, CEC also provides design, engineering and consulting services, as well as research and development in engineered composites.

1.3 PREVIOUS STUDIES AND REPORTS

This application for an Environment Act Licence is CECI's first report on environmental aspects of its operations. There are no other studies and/or reports related to CECI's operation.

2. FACILITY

2.1 CERTIFICATE OF TITLE

CECI does not own the land and the building where the facility is located (680 - 692 Mission St., Winnipeg, MB). The owner of the land is Oakcask Inc. of Toronto, Ontario.

The legal description of the site is:

Firstly: Lots 5 and 6, Plan 11084, WLTO in Lot “F” Roman Catholic Mission Property
Secondly: All that portion of Lot 1, Plan 11084 WLTO which lies between the straight productions NLY of the eastern and western limits of said lots 5 and 6 in Lot “F” Roman Catholic Mission Property.

A copy of the land title is attached in Appendix A.

2.2 MINERAL RIGHTS

As a tenant of the building in which it operates, CECI does not posses mineral rights associated with the property.

2.3 EXISTING LAND USE

CECI is located in the northwest part of the St. Boniface Industrial Park of the City of Winnipeg, with Boulevard Provencher to the NW, Mission St. north, Rue Lacombe to the south and Dawson Road to the southwest, as shown on Figure 1.

The existing land use of the subject and adjoining sites is M3, Manufacturing – Heavy, as defined by the City of Winnipeg Zoning By-Law. [(6)] There will be no change in the existing land use by the operation.

The following businesses are adjoining to the CECI site:

- Loveday Mushroom Farms, 556 Mission St.
- Cargill Animal Nutrition, 627 Plinguet St., also known as Standard Nutrition Services
- ASTRO Industrial Machine Ltd., 616 Provencher Boulevard
- Western Rawhide and Harness Manufacturing Inc., 700 Mission St.

- Central Grain Co., 172 Archibald
- Brenntag Canada, a chemical distributor, 681 Pliquet

- United Concrete, 727 Mission St.
- Shopost Iron Works, 675 Pliquet St.
- Marion Trucking, 578 McTavish St.

2.4 FACILITY SCHEDULE

Because CECI has been operating at the subject site for a number of years (since 1994), no description of planning, design, construction, operation, access road construction schedules and dates are applicable.

A description of the manufacturing processes occurring at the CECI facility is provided in another section of the report (see Section 4.1.1.2)

2.5 FUNDING

CECI has not requested or used grants or loan of capital funds from any governmental (federal, provincial or the City of Winnipeg) agency or program.

2.6 OTHER REGULATORY APPROVALS

Except for the Building Occupancy Permit from the City of Winnipeg (see Appendix B), CECI does not hold any federal, provincial or the City of Winnipeg approval, licence, permit, or authorization.

No public consultation was undertaken at the time of the startup of the CECI facility at the present location in 1994 and thereafter.

3. EXISTING ENVIRONMENT

3.1 TOPOGRAPHY

The facility site and the general area are flat.

The average elevation of the site is 234 m above sea level (asl).

A recent (2014) aerial photograph of the site is shown in Figure 3.

3.2 AIR

The nearest meteorological station with full observatory program is Winnipeg Forks, approximately 2.5 km northwest.

The average annual precipitation in Winnipeg, based on 30 years (1970-2000) of measurements, is relatively low (415.6 mm). [7]

Snow fall in Winnipeg occurs generally between October and April. The average annual amount is 110.6 cm. [7]

3.3 WATER

No surface water is present at the site and immediate vicinity.

The Seine River and the Red River are approximately 900 m northwest from the site. Aquatic life in these two rivers is unlikely to be affected by the facility, since there are no liquid or solid waste discharges to surface/groundwater and the land. Storm water is drained into the City's ditch along Mission Street.

3.4 LAND

The surficial geology of the local area consists of 5.5 – 14 m of glaciolacustrine clays and silts overlying a thin layer (0.3 – 0.6 m) of glacial till. [8,9]

The bedrock in this area consists of limestone and dolomite of Ordovician Red River Formation and is expected to be encountered between 18.6 – 21.3 mbg.[10]

A confined aquifer exists in the Palaeozoic carbonate bedrock underlying the City of Winnipeg. The aquifer is protected by a thick layer of low permeability clay. The water in the aquifer is of low quality (brackish to saline, total dissolved solids ~ 900 mg/L, chloride ~ 750 mg/L, sulphate 300 mg/L). [10,11] The aquifer water is used throughout the City for building cooling purpose.

Local area soil pH is neutral, i.e., 6.6 – 7.3 pH units. [11]

The concentration of soil organic carbon in local area is from 3.0 – 3.9 % and of the organic matter 5.0 to 6.7 %. [12]

Soil texture of local area is fine clay. [13]

3.5 ECOLOGY

There is no significant terrestrial environment at the site or immediate vicinity that could be impacted by the operation of the facility. There is anecdotal evidence of the occasional appearances of wildlife (rabbit, fox, geese, skunk, raccoon, deer, birds of prey, song birds, rodents, squirrels, ground hogs) in the nearby park (Mission Park/William Tell Archery) and the bush across Mission St. It is believed that endangered and threatened species, such as Baird's sparrow, burrowing owl, peregrine falcon, prairie orchid, buffalograss and other animals and plants listed under The Endangered Species and Ecosystems Act are not present due to lack of habitat in this area of the City.

3.6 REGIONAL RESOURCE USES

Since CECI operates in an urban environment, there are no significant resource uses, such as agriculture, forestry, mining, hydroelectric, oil and gas, recreation, tourism, etc.

3.7 SOCIOECONOMIC ENVIRONMENT

No existing public safety and human health risks in the local area have been identified with the operation of CECI's and other facilities.

There are no provincial and national protected areas, such as parks, in the local area.

Three of City of Winnipeg parks are relatively close to CECI: Mission Park, 150 m northwest, located at corner of Mission St. and Dawson Rd.; Seine River Greenway, 900 m west; and Lagimodiere-Gaboury historical park, 1,100 m west/northwest, along the Seine River.

The Forks, a national historic site, is approximately 2.4 km northwest of the site.

There are no First Nation communities in CECI's vicinity.

4. POTENTIAL IMPACTS

4.1 IMPACT ON AIR

Ambient air is the only component of the environment that could potentially be impacted by the operation of the CECI facility. Manufacturing operations at CECI release air emissions which are dispersed into the environment.

This section of the report addresses potential impacts of CECI emissions on ambient air.

4.1.1 Modelling of Dispersion of Air Emissions

In order to determine if air emissions from the facility would increase the ground-level concentration in the ambient air above the regulatory maximum acceptable levels mathematical modelling of emission dispersion is required.

CWS guidelines for air dispersion modelling in Manitoba were used to assess potential impact of CECI's air emissions on the environment and human health. [(14)]

4.1.1.1 Emission Dispersion Model Selection

To predict impacts of CECI air emissions on the ambient air under worst case dispersion and meteorological scenarios two screening models were used: AERSCREEN View, Version 1.2.0 and SCREEN 3. Both models were developed by US EPA and are used when impacts of air emissions on the environment and human health are to be assessed in a cost-effective way.

AERSCREEN View is a screening version of US EPA dispersion model AERMOD, while SCREEN3 is the screening version of US EPA dispersion model Industrial Source Complex (ISC3). While both screening models use the same or similar model input data, the SCREEN3 model is more conservative since it uses a full range of atmospheric stability class and wind speeds to calculate maximum 1-h concentrations at the ground level at various distances from the source. AERSCREEN View uses only a limited meteorological data, i.e. local air temperature and wind speed, to calculate the concentrations of modelled compounds in the ambient air and is therefore less conservative in predicting impacts on the ambient air.

If the predicted concentrations of modelled compounds in the ambient air using screening dispersion models are in compliance with ambient air quality standards and guidelines further modelling of dispersion of air emissions using refined, i.e. more complex and more costly, air emission dispersion models is normally not required. (14)

4.1.1.2 Facility and Process Description

CECI operates in an 11,355 m^2 production building, and several smaller outside structures, e.g., equipment and parts storage tents, shacks etc. A site plan is shown on Figure 2. A recent (October 2014) aerial view of the facility is shown on Figure 3.

Engineered composites are manufactured using liquid polyester resin reinforced with glass fibres and various inorganic filler materials. The thermosetting polyester resins are mixed with a catalyst, typically 1 to 2% w/w, to initiate polymerization of unsaturated polyester with a cross-linking monomer into a solid thermoset polymer. Common monomers are styrene, methyl methacrylate and vinyl toluene. Catalysts are organic peroxides, typically methyl ethyl ketone peroxide and acetyl acetone peroxide and hydrogen peroxide.

CECI fabricates composite products using open mold and light resin transfer mold (RTM) processes (so called “closed mold”). Mold is defined as a part that is an inside-outside image of the composite part to be manufactured.

Open Molding

In open molding, the mold surface is first cleaned and then treated with a compound (e.g., wax) that prevents the composite part to adhere to the mold. Afterward, pigmented resin, termed gel-coat, is applied with a spray gun to impair the desired colour to the composite part. The next process step involves simultaneous application of resin and catalyst with a spray gun, laying up fiber glass, compacting the part surface and removing entrapped air by roll-out. This step can be repeated until the desired thickness of the part is obtained. The composite part is then left to air-dry, removed from the mold, trimmed of excess material and sent for assembly. Gel coat and resins are stored in drums in the receiving area of the facility in amounts required for daily use.

Light Resin Transfer Molding (Light RTM)

Light RTM is a process by which composite products are manufactured using a closed mold system. The closed mold consists of a two-sided mold, a base mold and a semi-rigid side mold (counter mold) that is sealed to the base mold using vacuum pressure. Resin is drawn into the resulting cavity under vacuum. The resin infusion may be assisted by a resin injection pump, which will accelerate the infusion process. Once the part is cured, the counter side mold is removed and the part is demolded from the base side mold.

Composite Part Trimming, Drilling and Assembly

Composite parts are trimmed to the desired specification using tools such as sanders and grinders.

Holes in parts are drilled using standard drilling tools.

Parts are assembled into the desired shape either mechanically (bolting, riveting) or with sealants (urethane or methyl methacrylate based).

Composite Part Painting

Composite parts are painted using an overhead conveyor wet paint line and/or an automotive downdraft spray booth. Part drying is performed in a gas-fired oven. Dried parts are then moved to the storing and shipping area.

Solvent Washing

Acetone, and to a lesser degree other solvents, are used for cleanup of molds, tools and spraying equipment. A small portion of the acetone is recycled using an acetone recycling system located outside the main production building. Sludge left after acetone recycling is sent to a licensed hazardous waste contractor (Miller Environmental) for disposal off-site. The contractor also removes all other hazardous solid waste from the site.

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Fuel/Chemical Storage Tanks

There is no underground or above ground fuel or chemical storage tanks on the site.

4.1.1.3 Emission Dispersion Model Input

The following input data were entered into the screening dispersion model SCREEN3:

Emission Source Type

The modeller must select and provide rationale for use one of the following four emission source types: point, flare, area and volume. For the CECI's facility the option "volume source" was selected because there is a large number of relatively short height stacks on the roof, i.e. five gel-coat stacks, seven resin application stacks, six stacks for the paint line, two stacks for the paint line, two stacks for part sanding and grinding and 30 furnace vents. Combining multiple individual stacks into a volume source is a regulatory allowed practice since it provides more conservative estimates of the concentration of modelled compounds in the ambient air. (15)

Emission Rate of Modelled Compounds

A unit emission rate of 1 g/s was used and the predicted concentration in the ambient air calculated using prorated emission rate for the modelled compound. (15)

Source Release Height

3.75 m (for a volume source use the average building height of 7.5 m divided by two)

Initial Lateral Dimension of Volume Source

30.2 m, calculated by dividing building width (130 m) by 4.3 (15)

Initial Vertical Dimension of Volume Source

3.5 m, calculated by dividing the average building height with 2.15 (15)

Receptor Height above Ground

1.5 m, which corresponds approximately to the average height of the breathing zone of an adult.

Urban/Rural Option

Urban option was used based on Auer's analysis [14] (see Table 3)

Terrain

Simple terrain with terrain at source base was used

Meteorology

Full meteorology (all atmospheric stabilities and wind speeds)

Use Automated Distance Arrays?

Yes

Minimum and Maximum Distances to Use

100 m, 5,000 m (5,000 m is required by CWS) [14]

Use Discrete Distances?

Yes. Distances to receptors of air emissions were entered (see Section 4.1.1.3.2)

Screen3 model input data is shown in APPENDIX C.

Most AerScreen input data are identical to Screen 3 model, except that no worst case scenario of meteorology, for example wind calm, is included. Instead the model requires site-specific values of minimum and maximum air temperature and wind speeds from 0.5 m/s to 10.0 m/s. The model output concentrations are calculated as the average values and not as maximum concentrations when using SCREEN3.

For this project, the screening model SCREEN3 was used because the predicted concentrations of modeled compounds in the ambient air at receptor points are more conservative (i.e., higher in value)

4.1.1.3.1 Emission Sources and Contaminant Release

Open and closed mold processes, part trimming, part painting and solvent cleaning are the main production processes that release air emissions. [16]

Mold processes use gel-coats and resins which are classified as hazardous materials. Other hazardous materials used include resin catalysts, solvents, paints and adhesive products. [16]

According to CECI data, spray resins make up approximately 66% of all chemicals used, followed by gel-coats (~ 20%), mold preparation (~ 9%), catalysts (~ 2.6%), paint primer (~ 2%) and adhesives (~ 0.2%)

The principal contaminants of concern are styrene and methyl methacrylate in resin, gel-coats and mold preparation, methyl methacrylate and butyl benzyl phthalate in adhesives, methyl ethyl ketone peroxide and hydrogen peroxide in resin catalysts, and various solvents, e.g., acetone, butyl acetate, methyl amyl ketone, ethyl acetate, methyl ethyl ketone, and ethyl hexyl acetate in paints. Cleaning of tools and parts is performed principally using acetone and to lesser degree isopropyl alcohol and methyl amyl ketone.

Combustion of natural gas releases nitrogen oxides, NO_x, and carbon monoxide, CO, as principal hazardous substances. The total 2014 CECI's usage of natural gas was 996,686 m^3. Emissions of NO_x and CO were calculated using AP-42 emission factors. [17]

Styrene is used as a reactive resin diluent and as "bridge" to "crosslink" the polyester molecule chains. As a volatile organic compound the amount not used is released as air emissions. The amounts released are calculated using published unified emission factors. [18] Styrene emission factors provide emission rate in pounds of styrene emitted per ton of resin or gel-coat processed. They depend on the styrene content in resin/gel coat and the type of resin/gel-coat application (CECI uses mechanical atomized application of resins).

Emissions of methyl methacrylate released from resins and gel-coats were calculated also using published unified emission factors. [18].

For other process and cleaning chemicals, which are all volatile organic compounds, emissions were calculated from percents found in the list of hazardous ingredients in material MSDS and assuming that the released amounts were equal to purchased amounts.

Particulate matter, PM, is formed during the gelcoat and resin application as fine liquid droplets and during mechanical operations, such as part trimming, grinding and sanding. There are large wall mounted filters in the gel-coat and resin application areas of CECI's facility designed to capture emissions of PM. They appear to be working well, because an inspection of stacks and vents on the roof did not reveal any visible emission of PM, or staining of roof surface.

The ANSI standard for mold and gelcoat emissions does not include emission factors for PM. [18]

Also, the US EPA AP-42 document on polyester resin plastic products fabrication does not have an emission factor for PM. [19] Therefore emissions of PM in this report have not been addressed.

CECI's total working hours in 2014 were 5808.

Emission rates of modelled compounds, in g/s, were calculated by dividing the annual release with the number of working hours.

Annual release and emission rate for the modelled compounds are summarized on Table 1.

Sample calculation of air emission rates is attached in Appendix D.

4.1.1.3.2 Receptors of Air Emissions

A number of receptors of air emissions were selected at various distances from the CECI facility. The receptors included a city's park, a church, a school, a residential home nearest to the facility, two hospitals, a library, and two shopping/market centres.

Table 2 summarizes the receptors and their direction and distance from the facility.

For the receptor height, the model default (1.5 m) was used, which corresponds to the average height of adult breathing zone.

4.1.1.3.3 Meteorological Data

As described in Section 4.1.1.3, the option of “full meteorology”, i.e. dispersion of air emissions under all meteorological conditions, including wind calms, was selected. This option provides the most conservative (i.e., the highest) predicted concentrations in the environment.

4.1.1.3.4 Land Use Analysis

CECI operates in an industrial zone of the City of Winnipeg. The nearest businesses are a manufacturer of industrial machines, a trucking company, an agricultural company, a cement plant, a chemical distributor company and a saddle manufacturer.

Selection of model emission dispersion coefficients depends on the roughness of land surface which, in turn, depends on whether the land use in the vicinity is urban or rural.

The land use was determined using Auer’s methodology, as required by the provincial guidelines. [14]

A land area within a three km radius of the CECI’s facility was classified for major land use types, such as industrial (I), commercial (C), residential (R) and agricultural (A), as shown on Table 3. The predominant land use was determined to be “Urban”.

4.1.1.3.5 Site Topography

The site and the general area, is flat.

4.1.1.3.6 Background Air Quality

The nearest ambient air quality station is a CWS station located at Ellen St. in Winnipeg, approximately 4 km northeast from the CECI facility.

While the Ellen St. station measures several air quality parameters, data exist for only two parameters (carbon monoxide, CO, and nitrogen oxides, NO_x) modeled in this project. Their concentrations, as recorded on May 19, 2015 were 0.15 ppm for CO and 7.1 ppb for NO_x. [20]

4.1.1.3.7 Good Engineering Practice (GEP) Stack Height Analysis

This analysis is normally required for developments that are in the design stage or in cases where impacts of emissions from a development on the environment and human health are significant.

Since none of these two conditions is or was found not to be applicable to this project, the GEP stack height analysis was not considered.

4.1.2 Modelling Results

4.1.2.1 Predicted Short Term (0.5-h) Maximum Concentrations at Selected Receptors

Predicted 0.5-h maximum concentrations of modelled compounds at the ten receptors at the distances from the plant up to 5,000 m are presented on Table 4. They were calculated by multiplying Screen3 model results (maximum 1-h concentrations) with the emission factor for the modelled compound and by a factor of 1.2 to convert them to 0.5-h maximum concentrations. [15]

The regulatory levels, termed maximum acceptable concentrations in the ambient air in Manitoba [21] and local air quality standards and guidelines in Ontario [22], are presented in the last column.

4.1.2.2 Predicted Daily (24-h) Maximum Concentrations at Selected Receptors

Predicted 24-h maximum concentrations of modelled compounds at the ten receptors at the distances from the plant up to 5,000 m are presented on Table 5. They were calculated by multiplying the Screen3 model results (maximum 1-h concentrations) with the emission factor for the modelled compound and by a factor of 0.4 to convert them to 24-h maximum concentrations. [15]

The regulatory levels, termed maximum acceptable concentrations in MB [21] and local air quality standards and guidelines in Ontario [22], are presented in the last column.

4.1.3 Assessment of Emission Dispersion Modelling Results

4.1.3.1 Impact on the Environment

None of the compounds modelled exerts impact on the environment (e.g., flora, fauna, vegetation, water, soil) based on standards and guidelines from the Ontario MOE and Manitoba Conservation. [21,22]

No measurable impacts of CECI emissions on the environment are expected based on the values of the concentration of the modelled compounds in the ambient air summarized on Tables 4 and 5.

4.1.3.2 Impact on Human Health

Nine of compounds in Tables 4 and 5 have health impact as a basis for the regulatory limit. The other four compounds (styrene, methyl methacrylate, butyl acetate and ethyl acetate) have odour as an impact basis.

Based on the low values of the concentration of modelled compounds in comparison with the regulatory limits impact of CECI air emissions on human health can be considered as negligible.

The only potential, and perhaps occasionally real, impact that might be experienced would be short lasted odour impact of styrene on person(s) visiting the nearby Mission Street Park. The predicted 0.5-h maximum concentration of styrene (480 µg/m^3) in the park appears to exceed the regulatory limit of 400 µg/m^3 by approximately 20%. However, when the concentration of styrene calculated by the other screening model (AERSCREEN) (120 µg/m^3 at the Mission St. Park) is considered, then the odour impact on visitor(s) to the Park is not predicted.

As far as CECI is aware, there have not been odour complains filled with the regulatory authorities regarding CECI's operations.

4.2 IMPACT ON WATER

Impact of CECI's operations on water is non-existent because there are no water bodies or potable groundwater at the site and the immediate vicinity. As stated before, no process wastewater is generated during the manufacture of composite materials. Sanitary water is discharged through the City of Winnipeg sewer system. Storm water is drained to the City of Winnipeg ditch on the northeast site limit.

Potential impacts of CECI's operations on the Seine and Red River are considered unlikely. The predicted short-term (1-h) concentrations of the modelled compounds at the location of these two rivers are approximately 12 times lower then the predicted maximum values.

4.3 IMPACT ON SOIL AND AREA ECOLOGY

No potential impact on soil and area ecology is expected for the same or similar reasons discussed above when considering potential impact on water.

4.4 SUPPORTING DOCUMENTATION

Supporting documentation is shown on the report figures and in report tables and appendices.

5. REMEDIATION MEASURES TO CONTROL ENVIRONMENTAL IMPACTS

Because no potential or real impacts of CECI's operations on the environment and/or human health have been identified, as discussed in Sections 4.1 to 4.4, no remediation measures to control environmental impacts appear warranted.

6. FOLLOW-UP ENVIRONMENTAL MONITORING

Styrene release has been identified as the only air emission that potentially may impact human health in the immediate vicinity of the facility. Due to prevailing wind patterns and special meteorological conditions, such as wind calms styrene presence in the air could be identified intermittently. These instances are few and could be considered as a nuisance odour.

CECI is committed to improving its environmental performance and minimize air emissions and waste generation by:

- Considering alternative materials and process design, including increased use of closed mold systems
- Improving resin/gel coat spraying to optimize transfer efficiency
- Increasing the amount of solvent (acetone) recycling
- Optimizing chemical management and good housekeeping
- Continuing training workers on environmental, health and safety and fire protection regulations and waste reduction practices
- Monitoring trends and technologies within like industries and adopting best pollution prevention practices where applicable.

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Acknowledgement

BOMA Environmental & Safety Inc. thanks the following CECI's staff who provided project data, discussion, information and suggestions: Mr. Derek Armstrong, Mr. Brent Klimack, Mr. Garry Bergman, Ms. Shelley Haas and Mr. Bob Spearman.

Disclaimer

This report was prepared using 2014 purchase records of the materials prepared and reviewed by Carlson Engineered Composites Inc. (CECI). As such, it is as reliable as are the input data provided to BOMA E&S. No warranty is either expressed or implied by furnishing this report.

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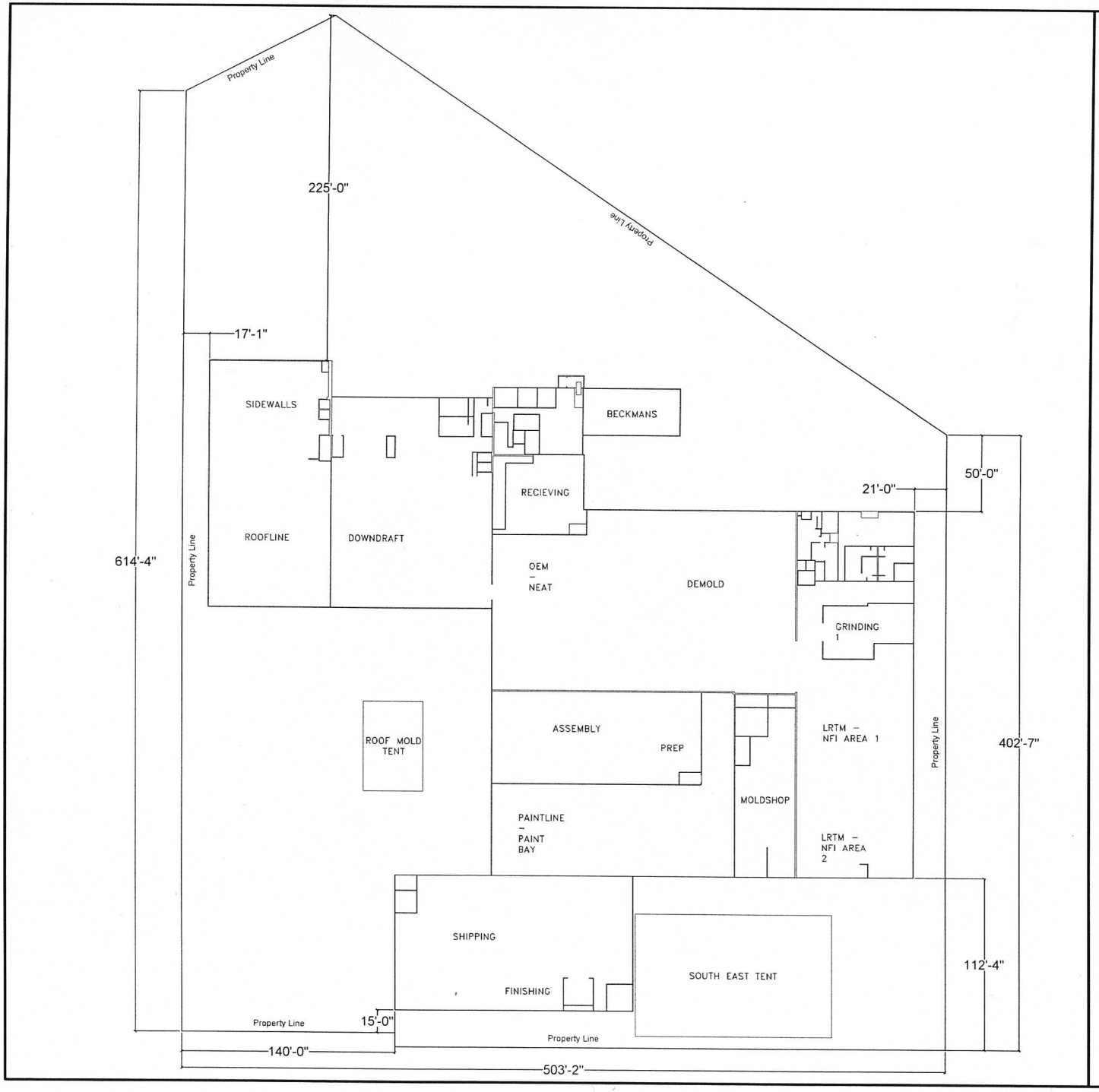
FIGURES

FIGURE 1: LOCATION PLAN



CARLSON ENGINEERED COMPOSITES INC.
692 MISSION STREET, R2J 0A4, WINNIPEG, MB, 204-233-0671

TITLE:

692 MISSION STREET
LAYOUT

DRAWN BY: R. JOHNSON	**DATE:** 31/MAY/94
REVISED BY: K. MAGNAYE	**DATE:** 21/MAY/15
SCALE: 1/92" = 1' - 0"	
REVISION NUMBER: 6	
CARLSON ENGINEERED COMPOSITES INC.	**PART NO.:**

FIGURE 3: AERIAL PHOTOGRAPH (2014)

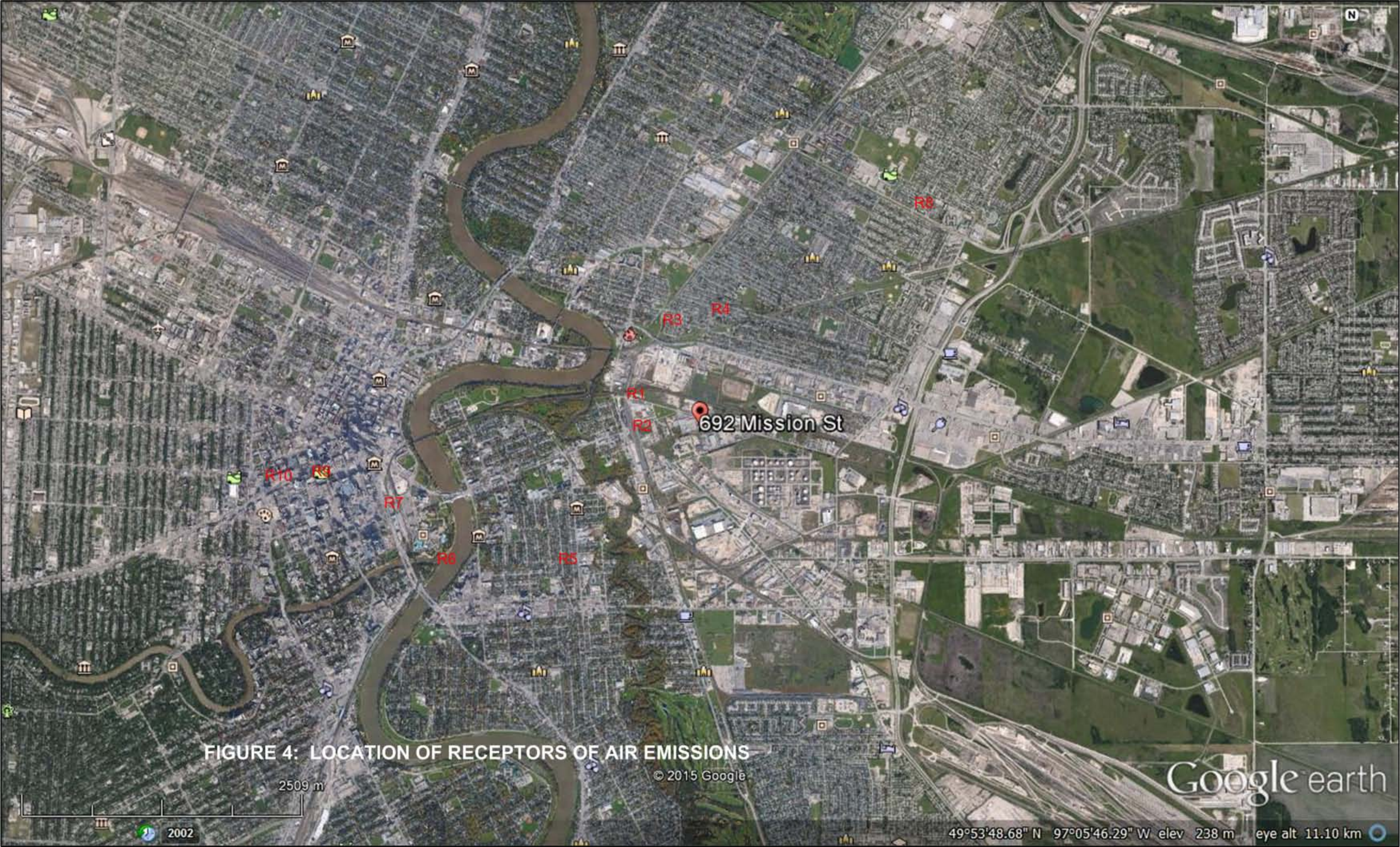


FIGURE 4: LOCATION OF RECEPTORS OF AIR EMISSIONS

TABLES

TABLE 1: Annual Release and Emission Rates of Modeled Compounds

No.	Compound	CAS No.	Annual Release, kg	Emission Rate, g/s
1	Styrene	100-42-5	22,460	1.07
2	Methyl methacrylate	80-62-6	2,891	0.14
3	Butyl benzen phthalate	85-68-7	119	0.006
4	Methyl ethyl ketone peroxide	1338-23-4	3,647	0.17
5	Hydrogen peroxide	7722-84-1	406	0.019
6	Acetone	67-64-1	103,202	4.9
7	Butyl acetate	123-86-4	2,194	0.10
8	Methyl amyl ketone	110-43-0	14,343	0.69
9	Ethyl acetate	141-78-6	1,817	0.087
10	Methyl ethyl ketone	78-93-3	1,261	0.06
11	Isopropyl alcohol	67-63-0	396	0.019
12	Nitrogen oxides, NO_X (as NO_2)	10102-44-0	1,595	0.076
13	Carbon monoxide, CO	630-08-0	1,340	0.064

TABLE 2

SELECTED RECEPTORS OF AIR EMISSIONS

RECEPTOR [R] AND ADDRESS	DISTANCE, m, [(1)] and COMPASS DIRECTION FROM FACILITY	
R1 - Mission Park	200	W/NW
R2 - Nearest Residential Home (Pliguet and Dawson)	360	SW
R3 - Holy Cross Lutheran Church	770	N/NE
R4 - St. Gerard School	850	N/NE
R5 - St. Joseph Academy	1,300	SW
R6 - St. Boniface Hospital	2,300	SW
R7 - The Forks Market	2,500	SW
R8 - Concordia Hospital	3,000	NE
R9 - Millenium Library	3,300	W/SW
R10 - Portage Place Shopping Plaza	3,600	W/SW

Note:

(1) From the center of the facility as the volume source of air emissions

TABLE 3

LAND USE ANALYSIS

Direction from the facility within 3 km limit	Land Use Type[(1)]
East	1.0 I2
North	0.3 I2; 0.7 R1
South	1.0 I2
West	0.3 I2; 0.3 R2; 0.4 A1
Northeast	0.5 I2; 0.5 R1
Southeast	1.0 I2
Southwest	0.3 I2; 0.3 R1; 0.4 A1
Northwest	0.5 I2; 0.5 R1
Overall Land Use, %	61% I2; 25% R1; 4% R2; 10% A1
Predominant Land Use:	I2 + R2 = 65% (Urban)

Note:
(1) Auer Land Use Classification Method

TABLE 4

MAXIMUM 0.5-h CONCENTRATION OF MODELED COMPOUNDS IN AMBIENT AIR AT SELECTED RECEPTORS

No.	Compound	CAS No.	Max. 0.5-h Concentration, µg/m^3 at Selected Receptors[1]										Regulatory Limit, µg/m^3 [2,3]	Impact
			R1	R2	R3	R4	R5	R6	R7	R8	R9	R10		
1	Styrene	100-42-5	480	248	95	84	48	23	21	17	15	13	400	Odour
2	Methyl methacrylate	80-62-6	63	32	12	11	6.3	3.0	2.7	2.2	1.9	1.7	860	Odour
3	Butyl benzen phthalate	85-68-7	2.70	1.40	0.53	0.47	0.27	0.13	0.12	0.09	0.08	0.07	450	Health
4	Methyl ethyl ketone peroxide	1338-23-4	76	39	15	13	7.7	3.7	3.3	2.6	2.4	2.1	250	Health
5	Hydrogen peroxide	7722-84-1	8.5	4.4	1.7	1.5	0.86	0.41	0.37	0.30	0.26	0.24	90	Health
6	Acetone	67-64-1	2,200	1,135	436	383	221	106	96	76	68	61	35,640	Health
7	Butyl acetate	123-86-4	45	23	8.9	7.8	4.5	2.2	2.0	1.6	1.4	1.2	735	Odour
8	Methyl amyl ketone	110-43-0	310	160	61	54	31	15	13	11	10	9	4,600	Health
9	Ethyl acetate	141-78-6	39	20	7.7	6.8	3.9	1.9	1.7	1.4	1.2	1.1	19,000	Odour
10	Methyl ethyl ketone	78-93-3	27	14	5.3	4.7	2.7	1.3	1.2	0.93	0.83	0.75	3,000	Health
11	Isopropyl alcohol	67-63-0	8.5	4.4	1.7	1.5	0.86	0.41	0.37	0.30	0.26	0.24	22,000	Health
12	Nitrogen oxides, NO_X (as NO_2)	10102-44-0	34	18	6.8	5.9	3.4	1.6	1.5	1.2	1.1	0.95	500	Health
13	Carbon monoxide, CO	630-08-0	29	15	5.7	5.0	2.9	1.4	1.2	0.99	0.88	0.80	6,000	Health

[1] For locations of receptors see Table 9

[2] Objectives and Guidelines for Various Air Pollutants, Ambient Air Quality Criteria, Manitoba Conservation, Updated July 2005

[3] Summary of O.Reg. 419/05 Standards and Point of Impingement Guidelines & Ambient Air Quality Criteria (AAQCs), Ontario Ministry of the Environment, April, 2012

TABLE 5

MAXIMUM 24-h CONCENTRATION OF MODELED COMPOUNDS IN AMBIENT AIR AT SELECTED RECEPTORS

No.	Compound	CAS No.	Max. 0.5-h Concentration, µg/m^3 at Selected Receptors[1]										Regulatory Limit µg/m^3 [2,3]	Impact
			R1	R2	R3	R4	R5	R6	R7	R8	R9	R10		
1	Styrene	100-42-5	160	83	32	28	16	7.7	7.0	5.5	4.9	4.4	400	Health
2	Methyl methacrylate	80-62-6	20.9	10.8	4.2	3.7	2.1	1.0	0.9	0.7	0.6	0.6	860	Odour
3	Butyl benzen phthalate	85-68-7	0.90	0.46	0.18	0.16	0.09	0.04	0.04	0.03	0.03	0.02	150	Health
4	Methyl ethyl ketone peroxide	1338-23-4	25.4	13.1	5.0	4.4	2.6	1.2	1.1	0.9	0.8	0.7	80	Health
5	Hydrogen peroxide	7722-84-1	2.8	1.5	0.56	0.50	0.29	0.14	0.12	0.10	0.09	0.08	30	Health
6	Acetone	67-64-1	733	378	145	128	74	35	32	25	23	20	11,880	Health
7	Butyl acetate	123-86-4	15	7.7	3.0	2.6	1.5	0.72	0.65	0.52	0.46	0.41	NA	
8	Methyl amyl ketone	110-43-0	103.0	53	20	18	10.00	5	4.5	3.6	3.2	2.9	4,600	Health
9	Ethyl acetate	141-78-6	13	6.7	2.6	2.3	1.3	0.63	0.57	0.45	0.40	0.36	NA	
10	Methyl ethyl ketone	78-93-3	9.0	4.6	1.8	1.7	0.90	0.43	0.39	0.31	0.28	0.25	NA	
11	Isopropyl alcohol	67-63-0	2.8	1.5	0.56	0.50	0.29	0.14	0.12	0.10	0.09	0.08	7,300	Health
12	Nitrogen oxides, NO_X (as NO_2)	10102-44-0	11.4	5.9	2.3	2.0	1.1	0.55	0.49	0.39	0.35	0.32	200	Health
13	Carbon monoxide, CO	630-08-0	9.6	4.9	1.9	1.7	0.96	0.46	0.42	0.33	0.29	0.27	NA	

[1] For locations of receptors see Table 9 NA - not available

[2] Objectives and Guidelines for Various Air Pollutants, Ambient Air Quality Criteria, Manitoba Conservation, Updated July 2005

[2] Summary of O.Reg. 419/05 Standards and Point of Impingement Guidelines & Ambient Air Quality Criteria (AAQCs), Ontario Ministry of the Environment, April, 2012

APPENDICES

APPENDIX A

Copy of Site Land Title

STATUS OF TITLE

Title Number **2118869/1**
Title Status **Accepted**
Client File 61485-7

The Property Registry
A Service Provider for the Province of Manitoba

1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

OAKCASK INCORPORATED

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

FIRSTLY: LOT 5 PLAN 11084 WLTO
IN LOT "F" ROMAN CATHOLIC MISSION PROPERTY

SECONDLY: ALL THAT PORTION OF LOT 1 PLAN 11084 WLTO
WHICH LIES BETWEEN THE STRAIGHT PRODUCTIONS NLY OF THE EASTERN AND WESTERN LIMITS OF SAID LOT 5
IN LOT "F" ROMAN CATHOLIC MISSION PROPERTY

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*.

2. ACTIVE INSTRUMENTS

Instrument Type:	**Caveat**
Registration Number:	**220178/1**
Instrument Status:	**Accepted**
Registration Date:	1971-09-30
From/By:	MAN. HYDRO ELECTRIC BOARD/MAN. TELEPHONE SYSTEM
To:	
Amount:	
Notes:	No notes
Description:	No description

STATUS OF TITLE

Title Number	**2118870/1**
Title Status	**Accepted**
Client File	61485-7

The Property Registry
A Service Provider for the Province of Manitoba

1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

OAKCASK INCORPORATED

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

FIRSTLY: LOT 6 PLAN 11084 WLTO
IN LOT "F" ROMAN CATHOLIC MISSION PROPERTY

SECONDLY: ALL THAT PORTION OF LOT 1 PLAN 11084 WLTO
WHICH LIES BETWEEN THE STRAIGHT PRODUCTIONS NLY OF THE
EASTERN AND WESTERN LIMITS OF SAID LOT 6
IN LOT "F" ROMAN CATHOLIC MISSION PROPERTY

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*.

2. ACTIVE INSTRUMENTS

Instrument Type:	**Caveat**
Registration Number:	**220179/1**
Instrument Status:	**Accepted**
Registration Date:	1971-09-30
From/By:	MAN. HYDRO ELECTRIC BOARD/MAN. TELEPHONE SYSTEM
To:	
Amount:	
Notes:	No notes
Description:	No description

APPENDIX B

Copy of Building Occupancy Permit

Winnipeg

BUILDING OCCUPANCY PERMIT

Planning, Property and Development Department
Service de l'urbanisme, des biens et de l'aménagement
4th Floor, 65 Garry Street • 65, rue Garry, quatrième étage
Winnipeg • Manitoba R3C 4K4

This permit issued pursuant to Winnipeg Building By-law No. 4555/87, and amendments thereto, confirms that the following use(s) and tenant(s) is/are allowed on the premises described herein:

680 MISSION ST
LIGHT MANUFACTURING
INTERIOR ALTERATION
"CARLSON ENGINEERED COMPOSITES INC."
OCCUPANCY CLASS: F2

Building Occupancy Permit No.
150854/2009
Re: Building Permit No.
138588/2009

January 15, 2010
Date

for
Manager of Development and Inspections

This permit to be posted in a prominent position in the entrance of the building and must not be removed except upon the authority of the Manager of Development and Inspections.

Winnipeg

BUILDING OCCUPANCY PERMIT

Planning, Property and Development Department
Service de l'urbanisme, des biens et de l'aménagement
4th Floor, 65 Garry Street • 65, rue Garry, quatrième étage
Winnipeg • Manitoba R3C 4K4

This permit issued pursuant to Winnipeg Building By-law No. 4555/87, and amendments thereto, confirms that the following use(s) and tenant(s) is/are allowed on the premises described herein:

692 MISSION ST
UNIT 680-692
CONTRACTORS ESTABLISHMENT
INTERIOR ALTERATION
"CARLSON ENGINEERED COMPOSITES INC."
OCCUPANCY CLASS: F2

Building Occupancy Permit No.
157265/2008
Re: Building Permit No.
153563/2008

August 24, 2012
Date

for
Manager of Development and Inspections

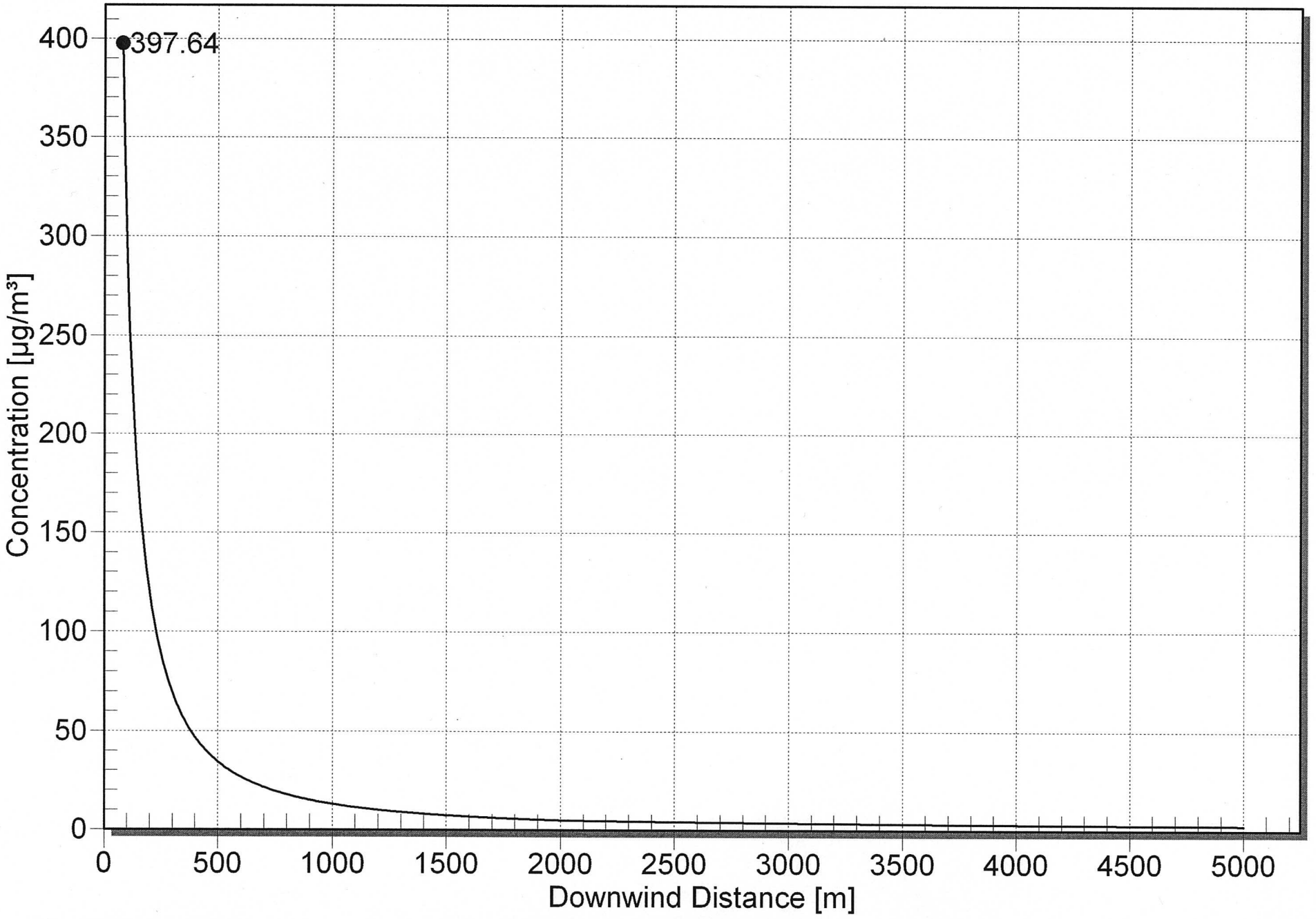
This permit to be posted in a prominent position in the entrance of the building/unit and must not be removed except upon the authority of the Manager of Development and Inspections.

APPENDIX C

Screening Dispersion Models Input and Output

Max 1-Hour Concentration vs Downwind Distance

Scenario 1 - Dispersion of styrene



Max Conc: 397.64 µg/m³ - Distance: 80.0 m - Elevation: 0.00 m

05/24/15
16:07:17

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

CECI Dispersion of Air Emissions for Unit Emission Rate

SIMPLE TERRAIN INPUTS:
SOURCE TYPE = VOLUME
EMISSION RATE (G/S) = 1.00000
SOURCE HEIGHT (M) = 3.7500
INIT. LATERAL DIMEN (M) = 30.2000
INIT. VERTICAL DIMEN (M) = 3.5000
RECEPTOR HEIGHT (M) = 1.5000
URBAN/RURAL OPTION = URBAN

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = .000 M**4/S**3; MOM. FLUX = .000 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
100.	704.9	5	1.0	1.0	10000.0	3.75	39.90	10.53	NO
200.	374.1	5	1.0	1.0	10000.0	3.75	49.29	16.77	NO
300.	239.3	5	1.0	1.0	10000.0	3.75	58.38	22.42	NO
400.	169.9	5	1.0	1.0	10000.0	3.75	67.19	27.58	NO
500.	128.9	5	1.0	1.0	10000.0	3.75	75.75	32.35	NO
600.	102.3	5	1.0	1.0	10000.0	3.75	84.08	36.80	NO
700.	83.89	5	1.0	1.0	10000.0	3.75	92.17	40.97	NO
800.	70.57	5	1.0	1.0	10000.0	3.75	100.06	44.90	NO
900.	60.54	5	1.0	1.0	10000.0	3.75	107.75	48.63	NO
1000.	52.77	5	1.0	1.0	10000.0	3.75	115.25	52.18	NO

1100.	46.60	5	1.0	1.0	10000.0	3.75	122.58	55.57	NO
1200.	41.61	5	1.0	1.0	10000.0	3.75	129.74	58.82	NO
1300.	37.50	5	1.0	1.0	10000.0	3.75	136.74	61.95	NO
1400.	34.06	5	1.0	1.0	10000.0	3.75	143.60	64.96	NO
1500.	31.15	5	1.0	1.0	10000.0	3.75	150.31	67.87	NO
1600.	28.66	5	1.0	1.0	10000.0	3.75	156.89	70.68	NO
1700.	26.51	5	1.0	1.0	10000.0	3.75	163.34	73.40	NO
1800.	24.63	5	1.0	1.0	10000.0	3.75	169.67	76.05	NO
1900.	22.99	5	1.0	1.0	10000.0	3.75	175.88	78.62	NO
2000.	21.53	5	1.0	1.0	10000.0	3.75	181.98	81.12	NO
2100.	20.24	5	1.0	1.0	10000.0	3.75	187.98	83.56	NO
2200.	19.08	5	1.0	1.0	10000.0	3.75	193.87	85.94	NO
2300.	18.04	5	1.0	1.0	10000.0	3.75	199.67	88.27	NO
2400.	17.10	5	1.0	1.0	10000.0	3.75	205.37	90.54	NO
2500.	16.25	5	1.0	1.0	10000.0	3.75	210.98	92.77	NO
2600.	15.47	5	1.0	1.0	10000.0	3.75	216.51	94.94	NO
2700.	14.76	5	1.0	1.0	10000.0	3.75	221.95	97.08	NO
2800.	14.11	5	1.0	1.0	10000.0	3.75	227.31	99.17	NO
2900.	13.51	5	1.0	1.0	10000.0	3.75	232.60	101.23	NO
3000.	12.95	5	1.0	1.0	10000.0	3.75	237.81	103.24	NO
3500.	10.73	5	1.0	1.0	10000.0	3.75	262.83	112.84	NO
4000.	9.127	5	1.0	1.0	10000.0	3.75	286.34	121.73	NO
4500.	7.929	5	1.0	1.0	10000.0	3.75	308.56	130.05	NO
5000.	7.000	5	1.0	1.0	10000.0	3.75	329.65	137.89	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 100. M:

100.	704.9	5	1.0	1.0	10000.0	3.75	39.90	10.53	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SCREEN DISCRETE DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
60.	.0000	0	.0	.0	.0	.00	.00	.00	

360.	193.0	5	1.0	1.0	10000.0	3.75	63.70	25.57	NO
770.	74.15	5	1.0	1.0	10000.0	3.75	97.71	43.74	NO
850.	65.22	5	1.0	1.0	10000.0	3.75	103.93	46.79	NO
3300.	11.52	5	1.0	1.0	10000.0	3.75	253.02	109.09	NO
3600.	10.37	5	1.0	1.0	10000.0	3.75	267.65	114.67	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	704.9	100.	0.

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

APPENDIX D

Sample Calculation of Emission Rates

Calculation of Annual Styrene Release (kg) and Emission Rate (g/s)

Emission rate in pounds of styrene per ton of resin or gelcoat processed were obtained from EF Table 1 of ANSI standard UEF-1-2011a. Styrene content in resin/gelcoat, %, was found from MSDS of the material used. For resin contents from 33% to 50% the emission rate is read off the table for the given process (mechanical atomized for resin, or gelcoat).

For example for the resin Stypol LHPD-22, CECI's code 180070, the styrene content is 38.4%. The emission rates for 38.0 and 39.0% of styrene are 183 and 197 lb/ton. For the resin content of 38.4 %, the emission rate is prorated to 189 lb/ton. The amount of Stypol purchased in 2014 was 141,999 kg, or 313,054 lb (139.8 ton). Therefore the yearly emission of styrene from this resin was 189 lb/ton x 139.8 ton = 26,422 lb (11,984 kg)

For resins having the styrene content less than 33%, the ANSI standard's Table provides a formula (Emission rate for the mechanical atomized spraying = 0.169 x % styrene x 2000, where the % styrene should be expressed as a fraction, e.g. 23.26% = 0.2326). For example, for the resin Norsodyne, CECI's code 180075, the styrene % is 23.26%. Then the emission of styrene is 0.169 x 0.2326 x 2000 = 78.6 lb/ton of material. The amount of Norsodyne purchased in 2014 was 59,379 kg (130,908 lb, or 58.4 ton). Therefore the yearly emission of styrene from this material was 78.6 lb/ton x 58.4.1 ton = 4,590 lb (2,082 kg).

The same calculation was conducted for all other resins purchased in 2014 and the total emission of styrene was obtained by summing up the emissions from individual resins. The result was 22,460 kg (49,516 lb). Since the total number of hours worked in 2014 was 5808, the emission rate of styrene was calculated to be 1.07 g/s [22,460 kg/5808 h x 1 h/3,600 s = 0.00107 kg/s = 1,07 g/s].

The same calculation procedure was undertaken for gelcoats. In cases where the % of styrene in MSDS was provided as a range, for example 23- 27%, the larger number was used in the calculation.

Calculation of Annual Methyl Methacrylate (MM) Release (kg) and Emission Rate (kg/s)

MM is an ingredient in gel-coats. Its emission and emission rates were calculated using the same ANSI Standard Table used for the calculation of the styrene emissions.

Calculation of Annual Emission of Other Contaminants

The calculation used information on the % of the compound in the material (from MSDS), the amount of the material purchased in 2014 and the number of total working hours in 2014 (5808 h).

For example, the annual amount of methyl amyl ketone (a solvent), CAS No. 110-43-0, in paints (as provided by the paint supplier) was 4,335 lb (1,966 kg). Ethyl acetate was also an ingredient (70%) in an equipment and parts washing solvent (Gunwash, CECI's Code 190035, the purchased amount in 2014 was 17,680 kg). The annual emission of this solvent therefore was 1,966 kg (from paints) and 17,680 x 0.7 = 12,376 kg, for a total use of 14,343 kg. The emission rate (0.69 g/s), was calculated from data on the annual emission and the working hours (as shown above).

Calculation of Emission of NO_x from Combustion of Natural Gas

The EPA emission factor (AP-42) is 1,600 kg/10^6 m^3. Since the annual gas consumption was 996,687 m^3 (0.996687 x 10^6) the release of NO_x was 1,595 kg. The emission rate was 1,595 kg/5808 h x 1h/3,600 s = 0.076 g/s.

Carlson Engineered Composites
692 Mission Street
R2J 0A3
T 204-233-0671 **F 204-258-4029**
www.carlsoncomposites.com

August 14, 2015

Mr. Eshetu Beshada
Municipal and Industrial Section
Environmental Approvals Branch
Manitoba Conservation and Water Stewardship
Environment Compliance and Enforcement
2nd Flr.123 Main Street, Suite 160 (Box 80)
Winnipeg, Manitoba
R3C 1A5

Mr. Eshetu Beshada,

Please find enclosed in this e mail package of information the requested documentation from July 7th, 2015.

Enclosed within this package we have provided you the information pertaining to the following items.

1. List and quantity of each chemical used monthly and annually in the process.
2. Quantities of each of the chemicals stored onsite at any given time.
3. Provision of any spill containment procedures used in the facility.
4. A copy of agreement indication the land owner Oakcask Inc. that authorizes the operation of Carlson Engineering on its property.

Thank you for your assistance over the past year in answering questions and support of this project.

Should you have any questions or concerns regarding this request please feel free to contact me.

Best Regards,

Derek Armstrong
Director of Human Resources
Carlson Engineered Composites
204-940-4714
204-330-8768
darmstrong@carlsongrpco.com

Attachments:

1. Usage by Month and Annually (2014) - See Attachment 1
2. Stock on Hand – See Attachment 2
3. Spill Containment Procedures – See Attachment 3
4. Operational Agreements
    a. Land Titles Property Agreement indicating Oakcast as the property owner – See Attachment 4
    b. Site Authorization Documents indicating that Carlson Engineered Composites has approval from the owner of the property for day to day operations – See Attachment 5

					2014									
	January	February	March	April	May	June	July	August	September	October	November	December		
Sum of TrnQty	**Column Labels**													
Row Labels	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**(blank)**	**Grand Total**
110006 LB CATALYST MEKP-9 WAS DDM-9		16	14	32		32	32			32	0	64		221.86
110022 KG CATALYST LUPEROX #224 (RTM)	397	499	1135	684	754	638	467	435	717	655	551	508		7438.7
110030 LB CATALYST DDM-9 DR(DIM RED)	96	64	64	112	168	160	128	128	264	128	96	96		1504
110035 LB NOROX MEKP-900 FRED(32 LBS/BX)	736	672	796	704	736	608	640	736	896	896	736	576		8732.28
110046 LB CATALYST - NOROX MEKP-925H	992	1088	1344	864	902	992	992	1088	1114	800	544	512		11232
130000 EA SIKA 205 AKTIVATOR (1000ML.)			24	4	4		2	2	8	24	11	-23		56
130004 EA SIKAFLEX 252 -WHITE	85	84	70	116	46	21	24	48	70	31	38	38		671
130033 EA ADHESIVE, PLEXUS MA1020 380ML	173	214												387
130035 EA PLEXUS AO420 -BLK TUBES-12/Box						66		36	48	36		48		234
130038 EA ADHESIVE, PLEXUS, MA920, 380ML	64		-3											61
130039 EA PLEXUS MA300 (400ML)	3	3	5	2		1	1	3		4	5			27
130255 LTR AO1020-ADHESIVE (18.9LTR/pail)	151	132	227	266	248	243	151	189	302	265	208	170		2551.49
130260 LTR AO420-BLACK ACT (18.9LTR/pail)	38		57	19	38	19	19	19	57	38	19	19		340.2
130265 EA SIKA 206 G&P PRIMER (1000ML.)	15	18	35	34	26	31	20	33	52	29	23	17		333
130350 QT PLEXUS PRIMER PC120	3	1	1	3	3	1		2	2	1	1	1		19
140009 KG 10-410 LV BLACK PASTE										4	12	8		24
150013 KG G203-70001 -2011							450	675						1125
150014 KG G203-70016 -2005/-2016 CHAR	250				250			250			250	250		1250
150100 KG G234-90430							0							0
150146 KG G215-80162 -2004	1250	1500	1475	2208	2700	2550	2506	994	750	1000	250			17183
150200 KG GELCOAT-SDBL GREY CCP 969AJ371	14259	15305	17932	18260	16516	15388	16592	14782	16969	17176	14378	11220		188775.94
150228 KG 2330PAWK745 WHITE	92	54	178	80		20	88	54	80	128	221	48		1040.38
150395 KG G203-70856 -2007	20				60	475	650							1205
150433 KG G203-70855 -2012	225			225			225		695	650	225	225		2470
150465 KG G203-70905 -2013	225		20	20		246	225		225					961
150500 KG PCT 100 - MACDON RED	1492	853	385	853	431	426	209	640	1066	426	426	640		7848.1
150503 KG PCT 110X JOHN DEERE GREEN	218	640	1066		1098	640	209		640	640		213		5362.5
150510 KG G203-81353 -2022			450	225	244	70	10			245				1244
150530 KG G203-71088 -2025	225	450	450			225	225		445	225				2245
150532 KG MORRIS RED 54X-63780		238		237			125	237		232				1068.6
150580 KG GC CNH POWER TAN CCP-991NH093										22	21			42.6
150585 KG GC -CNH CE GRAY - CCP-991AH286										22	21			42.6
152080 KG G203-71161 -2030 PRETORIA GREY		225	225											450
170016 GAL REDUCER DT870 (1 GAL CAN)	1													1
170020 GAL DX 330 WAX & GREASE REMOVER	31	36												67
170021 QT ROAD GUARD DX54	6	12	22	18	30	24	42	36	30	36	23	36		315
170027 GAL DX103 ANTI-STATIC SPRAY			1											1
170030 EA PAINT,SPRAY EN-16 #100 DK.GREY									4					4
170047 GAL 1220S GREY PRIMER										4				4
170048 GAL 15395S REDUCER	49	42	44	48	54	40	30	41	57	52	38	28		523
170070 PL DT885 REDUCER (5 GAL.PAIL)		2	-2											0
170110 GAL DCC8631										4				4

170112 GAL DCC98238										4			4
170140 GAL DDH526 CATALYST										8		-8	0
170226 GL 226S ALUMINUM CONVERSION CTG								1					1
170390 GAL AS-150-BLACK (ANTI SLIP)	7	5	5	12	10	1	2	2	3	7	2	9	65
170790 GAL HST907953 -1219						0							0
170795 GAL HST922303 BLACK -5006									4				4
170925 GAL HST924854 WHITE -1242										4			4
170930 GAL HST925222 WHITE			0	0									0
170970 GAL CLEARCOAT -8430S DUPONT	136	116	48	64	76	56	48	68	105	79	48	44	888
170971 QT ACTIVATOR-15303S LOW TEMP	245	205	143	132	148	104	96	144	183	190	97	95	1782
170972 GAL BLENDER-CLEAR 7601 ELC660 DUPT	3	1	1		1	1				1	5	-3	10
170975 GAL PRIMER 373P26339 DUPONT	113	108	131	132	152	112	96	108	139	116	104	121	1432
170976 GAL 2540S ACN249 EPOXY PRIMER						1							1
170977 GAL 2505S ALC001 ACTIVATOR DUPONT					1								1
170981 EA FLAT BLK AEROSOL DUPONT A5099S			12	0	4			5		92	38	-43	108
170982 GAL 848PN5636LG LOW GL FLAT BLACK	24	32	40	32	48	40	48	28	24	36	35	41	428
170990 QT ACTIVATOR- 196S-DUPONT	322	320	312	324	360	192	197	208	238	244	205	223	3145
170991 GAL ACTIVATOR - 194S-AB - DUPONT	28	32	36	36	47	20	24	30	36	29	28	26	372
170992 QT ACCELERATOR -189S- DUPONT	24	18	18	24	18	6	6	12	6	20	6	0	158
170993 GAL ACCELERATOR-8989S-FAST-DUPONT	3	1	1	3	2	4	2	1	3	3	2	3	28
170994 QT ACCELERATOR - 389S-DUPONT	57	53	51	54	42	30	24	26	38	42	30	24	471
170997 QT ACTIVATOR 922S (FOR 921S ETCH)						0		0					0
170998 GAL RETARDER Y32401	1		1		1			2	1		1		7
170999 GAL 225S ETCH TREATMENT ALUM								2					2
1714004S GL PRIMER - 4004S								12	8	8	20		48
1714075S QT PRIMER ACTIVATOR	2	7	18					12	24		12	6	81
171594 GAL FMJ-C "B" COMPONENT BLACK	220	275	220	275	165	165	110	220	220	220	110	165	2365
171595 GAL FMJ-C "B" COMPONENT YELLOW	120	110	110	165	165	110	165	165	162	220	110	165	1767
171596 GAL FMJ-C "A" COMPONENT ACTIVATOR	345	385	330	275	440	275	330	275	385	440	220	330	4030
171610 GAL PRIMER EPOXY DPT-2510S (WHITE)				1	1								2
172015 GL AUE370 MACDON RED RAL# 3011											2		2
172020 QT GXH1086 URETHANE HARDNER											2		2
172025 GL MR187 SLOW REDUCER											1		1
172030 QT UA11 URETHANE HARDNER											1		1
172330S QT ADHESION PROMOTER GREY	17	18	18	24	18	18	18	6	25	18	24	17	221
1771001S GR TINT-WHITE PEARL(150 GRAM BTL)		150											150
1771002S GR TINT-RED PEARL(150 GRAM BTL)			150										150
1771004S GR TINT-BLUE PEARL(150 GRAM BTL)		600											600
177101 GAL TINT-WHITE PT101 ACN 249	64	44	36	56	48	20				12	32	12	324
177105 GAL TINT-BLACK PT105 ACN 249 HS	2	3		4									9
177107 GAL TINT-BLACK PT107 ACN 249 LS	4	4		4									12
177110 GAL TINT-ALUM PT110 ACN 249 FINE	4								16			4	24
177112 GAL TINT-ALUM PT112 ACN 249 MED	12		16	12	8	8	16	4	4	4	12	12	108
177114 GAL TINT-ALUM PT114 ACN 249 COARSE	4	4	16	8	4	8	16	4		8	8		80
177120 GAL TINT-PT120 BLUE SHADE VIOLET							8						8
177122 GAL TINT PT122 INDO BLUE TINT				4									4

177124 GAL TINT PT124 RED SHADE BLUE HS	8					4	8						20
177125 GAL TINT PT125 RED SHADE BLUE LS							4						4
177127 GAL TINT PT127 GREEN SHADE BLUE HS			4										4
177132 GAL TINT PT132 BLUE SHADE GREEN	4							4					8
177140 GAL TINT PT140 GREEN SHADE YELLOW		8			4				4			8	24
177144 GAL TINT PT144 YELLOW		4	4										8
177148 GAL TINT PT148 RED SHADE YELLOW			4										4
17715305S QT ACTIVATOR IMRON ELITE		36											36
177154 GAL TINT PT154 ORANGE			4	4									8
177162 GAL TINT PT162 TRANSPARENT RED			4										4
177164 GAL TINT PT164 MAGENTA												2	2
177165 GAL TINT PT165 OPAQUE RED			4	10			8	4	4				30
177166 GAL TINT PT166 OPAQUE BLUE / RED			4	10			8	4	4			8	38
177181 GAL TINT PT181 YELLOW OXIDE			4										4
177183 GAL TINT PT183 TRANSP YELLOW OXIDE			12										12
177185 GAL TINT PT185 RED OXIDE				4									4
177187 GAL TINT PT187 TRANSP RED OXIDE												4	4
177191 GAL ADDITIVE PT191	4	4											8
177192 GAL ACTIVATOR PT192 IMRON ELITE	4	4			12			4				4	28
177196 GAL FLATENER PT196				4						4			8
177197 GAL BINDER PT197	24	16	32	4	12	8	12		24	8	8	4	152
177198 GAL BINDER PT198 NON-RHEOLOGY HS	36	24	52	20	32	16	8	8	12	20	4	20	252
177250S GAL 250S METALOCK CVP PRETREATMENT							1					1	2
177255S GAL METALOCK CVP ACTIVATOR							1					1	2
177285S GAL REDUCER 7285S ADR526		28	12	12	16	8		8		4	12		100
177400E GAL BINDER 7400E IMRON ELITE	12	4	28	20	20	12	8	8	4	12	4	8	140
177410E GAL BINDER 7410E ELITE EXPRESS	8	4	28	4	20	8	8	8		4	8	4	104
1777800E GAL BINDER 7800E ACN249 IMRON									20	12			32
1777810E GAL PRODUCTIVE METALLIC IMRON	12	20	24	16	32	24	20	16	52	28	16	20	280
1777899E GAL BINDER RHEOLOGY				4					4	8			16
1778400E GAL BINDER 8400E BASECOAT HS	20	8	20										48
1778475S GAL 8475S REDUCER	4	12	24		8			8		12	4	12	84
178400E GAL DON'T USE-USE 1778400E INSTEAD	0												0
180004 KG RESIN, IFRL, LAB480-2							660	1540		220	1479		3899
180010 KG VSXH2210 MOLD RESIN	352			227		227	227		227		227	454	1939.1
180025 KG VIBRIN 7000 CORROSION RESIST							0						0
180034 KG RESIN,DION FR7704-00	494	747	747	249		249		249	335	747	974	249	5040
180049 KG RESIN,RTM 040-8085						0							0
180070 KG STYPOL LHPD-2222	14510	11340	14726	13361	13134	8618	9712	13300	12928	11567	12021	7711	142927
180075 KG NORSODYNE H82169TF	2496	1746	3267	6981	9735	7983	6986	3992	4242	4741	4242	3244	59652.9
180110 KG H834-VDD-24	14400	12600	15300	13500	17029	13500	10800	16200	16200	16200	13500	9900	169129
180140 KG L68401-T-25 CODE 44560									231				231
180150 KG RESIN,RTM 040-8086	24495	27196	29930	31752	33567	23587	24494	21773	31752	29938	24495	20866	323844.5
180170 KG IVSXH-200 VINYL ESTER RESIN	4536	4536	7258	2722	3629	5443	1814	2722	5443	3608	2722	1814	46246.8
180175 KG OPTIPLUS TOOLING RESIN	872	436	424	885	440	802		218	653	435	653	871	6689.9
180180 KG BARRIER COAT 967BK150	1458	1545	1567	1129	1333	1329	445	662	1765	889	889	656	13667.7

190000	KG ACETONE	7776	7128	9072	8424	8424	9072	8424	9072	9072	10368	9072	7128	103032
190004	LTR ISOPROPYL ALCOHL(1 PL= 20.28L)	61		81		81			61	81				365.04
190030	GAL CLEANER 2320S ACN 728 -DUPONT		12	36	36	24	16		16	10	8		8	166
190035	DR GUNWASH 3642SC DUPONT	10	12	8	10	10	8	8	8	10	6	8	6	104
190045	GAL KLENE-SOL 3919SC							16	24	16	8	12		76
(blank)														
Grand Total		**94448**	**92108**	**110408**	**106041**	**113628**	**95002**	**88939**	**91670**	**109207**	**104455**	**89600**	**68938**	**1164445.19**

StockCode	Description	Unit of Measure	Control #	Quantity On Hand (Warehouse 01)
110006	CATALYST MEKP-9 WAS DDM-9	LB	11.00000	0
110022	CATALYST LUPEROX #224 (RTM)	KG	11.00000	68
110030	CATALYST DDM-9 DR(DIM RED)	LB	11.00000	86
110035	NOROX MEKP-900 FRED(32 LBS/BX)	LB	11.00000	126
110046	CATALYST - NOROX MEKP-925H	LB	11.00000	128
130000	SIKA 205 AKTIVATOR (1000ML.)	EA	13.00000	11
130004	SIKAFLEX 252 -WHITE	EA	13.00000	51
130033	ADHESIVE, PLEXUS MA1020 380ML	EA	13.00000	24
130035	PLEXUS AO420 -BLK TUBES-12/Box	EA	13.00000	12
130038	ADHESIVE, PLEXUS, MA920, 380ML	EA	13.00000	4
130039	PLEXUS MA300 (400ML)	EA	13.00000	10
130255	AO1020-ADHESIVE (18.9LTR/pail) -	LTR	13.00000	76
130260	AO420-BLACK ACT (18.9LTR/pail) -	LTR	13.00000	38
130265	SIKA 206 G&P PRIMER (1000ML.)	EA	13.00000	28
130350	PLEXUS PRIMER PC120	QT	13.00000	4
140009	10-410 LV BLACK PASTE	KG	14.00000	4
150013	G203-70001 -2011	KG	15.00000	216
150014	G203-70016 -2005/-2016 CHAR	KG	15.00000	250
150100	G234-90430	KG	15.00000	250
150146	G215-80162 -2004	KG	15.00000	250
150200	GELCOAT-SDBL GREY CCP 969AJ371	KG	15.00000	2385
150228	2330PAWK745 WHITE	KG	15.00000	160
150395	G203-70856 -2007	KG	15.00000	75
150433	G203-70855 -2012	KG	15.00000	225
150465	G203-70905 -2013	KG	15.00000	280
150500	PCT 100 - MACDON RED	KG	15.00000	280
150503	PCT 110X JOHN DEERE GREEN	KG	15.00000	280
150510	G203-81353 -2022	KG	15.00000	225
150530	G203-71088 -2025	KG	15.00000	225
150532	MORRIS RED 54X-63780	KG	15.00000	225
150580	GC CNH POWER TANCCP-991NH093	KG	15.00000	25
150585	GC -CNH CE GRAY - CCP-991AH286	KG	15.00000	25
152080	G203-71161 -2030 PRETORIA GREY	KG	15.00000	225
170016	REDUCER DT870 (1 GAL CAN) -	GAL	17.00000	3
170020	DX 330 WAX & GREASE REMOVER -	GAL	17.00000	40
170021	ROAD GUARD DX54	QT	17.00000	45
170027	DX103 ANTI-STATIC SPRAY -	GAL	17.00000	6
170030	PAINT,SPRAY EN-16 #100 DK.GREY	EA	17.00000	6
170047	1220S GREY PRIMER -	GAL	17.00000	4
170048	15395S REDUCER -	GAL	17.00000	25
170070	DT885 REDUCER (5 GAL.PAIL)	PL	17.00000	5
170110	DCC8631 -	GAL	17.00000	4
170112	DCC98238 -	GAL	17.00000	4
170140	DDH526 CATALYST -	GAL	17.00000	4

StockCode	Description	Unit of Measure	Control #	Quantity On Hand (Warehouse 01)
170226	226S ALUMINUM CONVERSION CTG	GL	17.00000	2
170390	AS-150-BLACK (ANTI SLIP) -	GAL	17.00000	10
170795	HST922303 BLACK -5006 -	GAL	17.00000	0
170925	HST924854 WHITE -1242 -	GAL	17.00000	0
170970	CLEARCOAT -8430SDUPONT -	GAL	17.00000	15
170971	ACTIVATOR-15303S LOW TEMP	QT	17.00000	60
170972	BLENDER-CLEAR 7601 ELC660 DUPT -	GAL	17.00000	2
170975	PRIMER 373P26339DUPONT -	GAL	17.00000	75
170976	2540S ACN249 EPOXY PRIMER -	GAL	17.00000	4
170977	2505S ALC001 ACTIVATOR DUPONT -	GAL	17.00000	3
170981	FLAT BLK AEROSOL DUPONT A5099S	EA	17.00000	10
170982	848PN5636LG LOW GLFLAT BLACK -	GAL	17.00000	10
170990	ACTIVATOR- 196S-DUPONT	QT	17.00000	55
170991	ACTIVATOR - 194S-AB - DUPONT -	GAL	17.00000	10
170992	ACCELERATOR -189S- DUPONT	QT	17.00000	30
170993	ACCELERATOR-8989S-FAST-DUPONT -	GAL	17.00000	2
170994	ACCELERATOR - 389S-DUPONT	QT	17.00000	30
170998	RETARDER Y32401 -	GAL	17.00000	2
170999	225S ETCH TREATMENT ALUM -	GAL	17.00000	3
1714004S	PRIMER - 4004S	GL	17.00000	4
1714075S	PRIMER ACTIVATOR	QT	17.00000	4
171594	FMJ-C "B" COMPONENT BLACK -	GAL	17.00000	495
171595	FMJ-C "B" COMPONENT YELLOW -	GAL	17.00000	165
171596	FMJ-C "A" COMPONENT ACTIVATOR -	GAL	17.00000	840
171610	PRIMER EPOXY DPT-2510S (WHITE) -	GAL	17.00000	0
172015	AUE370 MACDON RED RAL# 3011	GL	17.00000	0
172020	GXH1086 URETHANE HARDNER	QT	17.00000	0
172025	MR187 SLOW REDUCER	GL	17.00000	0
172030	UA11 URETHANE HARDNER	QT	17.00000	0
172330S	ADHESION PROMOTER GREY	QT	17.00000	15
1771001S	TINT-WHITE PEARL(150 GRAM BTL)	GR	17.00000	300
1771002S	TINT-RED PEARL(150 GRAM BTL)	GR	17.00000	300
1771004S	TINT-BLUE PEARL(150 GRAM BTL)	GR	17.00000	300
177101	TINT-WHITE PT101 ACN 249 -	GAL	17.00000	2
177105	TINT-BLACK PT105 ACN 249 HS -	GAL	17.00000	2
177107	TINT-BLACK PT107 ACN 249 LS -	GAL	17.00000	2
177110	TINT-ALUM PT110 ACN 249 FINE -	GAL	17.00000	2
177112	TINT-ALUM PT112 ACN 249 MED -	GAL	17.00000	4
177114	TINT-ALUM PT114 ACN 249 COARSE -	GAL	17.00000	4
177120	TINT-PT120 BLUE SHADE VIOLET -	GAL	17.00000	2
177122	TINT PT122 INDO BLUE TINT -	GAL	17.00000	2
177124	TINT PT124 RED SHADE BLUE HS -	GAL	17.00000	2
177125	TINT PT125 RED SHADE BLUE LS -	GAL	17.00000	2
177127	TINT PT127 GREEN SHADE BLUE HS -	GAL	17.00000	2

StockCode	Description	Unit of Measure	Control #	Quantity On Hand (Warehouse 01)
177132	TINT PT132 BLUE SHADE GREEN -	GAL	17.00000	2
177140	TINT PT140 GREEN SHADE YELLOW -	GAL	17.00000	4
177144	TINT PT144 YELLOW -	GAL	17.00000	2
177148	TINT PT148 RED SHADE YELLOW -	GAL	17.00000	2
17715305	ACTIVATOR IMRON ELITE	QT	17.00000	0
177154	TINT PT154 ORANGE -	GAL	17.00000	2
177162	TINT PT162 TRANSPARENT RED -	GAL	17.00000	1
177164	TINT PT164 MAGENTA -	GAL	17.00000	1
177165	TINT PT165 OPAQUE RED -	GAL	17.00000	2
177166	TINT PT166 OPAQUE BLUE / RED -	GAL	17.00000	2
177181	TINT PT181 YELLOW OXIDE -	GAL	17.00000	1
177183	TINT PT183 TRANSP YELLOW OXIDE -	GAL	17.00000	2
177185	TINT PT185 RED OXIDE -	GAL	17.00000	1
177187	TINT PT187 TRANSP RED OXIDE -	GAL	17.00000	1
177191	ADDITIVE PT191 -	GAL	17.00000	1
177192	ACTIVATOR PT192 IMRON ELITE -	GAL	17.00000	2
177196	FLATENER PT196 -	GAL	17.00000	1
177197	BINDER PT197 -	GAL	17.00000	5
177198	BINDER PT198 NON-RHEOLOGY HS -	GAL	17.00000	5
177250S	250S METALOCK CVP PRETREATMENT -	GAL	17.00000	0
177255S	METALOCK CVP ACTIVATOR -	GAL	17.00000	0
177285S	REDUCER 7285S ADR526 -	GAL	17.00000	4
177400E	BINDER 7400E IMRON ELITE -	GAL	17.00000	4
177410E	BINDER 7410EELITE EXPRESS -	GAL	17.00000	4
1777800E	BINDER 7800E ACN249 IMRON -	GAL	17.00000	2
1777810E	PRODUCTIVE METALLIC IMRON -	GAL	17.00000	12
1777899E	BINDER RHEOLOGY -	GAL	17.00000	1
1778400E	BINDER8400E BASECOAT HS -	GAL	17.00000	4
1778475S	8475S REDUCER -	GAL	17.00000	4
180004	RESIN, IFRL, LAB480-2	KG	18.00000	225
180010	VSXH2210 MOLD RESIN	KG	18.00000	225
180025	VIBRIN 7000 CORROSION RESIST	KG	18.00000	0
180034	RESIN,DION FR7704-00	KG	18.00000	250
180049	RESIN,RTM 040-8085	KG	18.00000	0
180070	STYPOL LHPD-2222	KG	18.00000	1000
180075	NORSODYNE H82169TF	KG	18.00000	250
180110	H834-VDD-24	KG	18.00000	1800
180140	L68401-T-25 CODE 44560	KG	18.00000	0
180150	RESIN,RTM 040-8086	KG	18.00000	4000
180170	IVSXH-200 VINYL ESTER RESIN	KG	18.00000	750
180175	OPTIPLUS TOOLING RESIN	KG	18.00000	250
180180	BARRIER COAT 967BK150	KG	18.00000	250

Carlson Engineered Composites
692 Mission Street
R2J 0A3
T 204-233-0671 **F 204-258-4029**
www.carlsoncomposites.com

August 14, 2015

Mr. Eshetu Beshada
Municipal and Industrial Section
Environmental Approvals Branch
Manitoba Conservation and Water Stewardship
Environment Compliance and Enforcement
2nd Flr.123 Main Street, Suite 160 (Box 80)
Winnipeg, Manitoba
R3C 1A5

Mr. Eshetu Beshada,

Re: Spill Containment Procedures within Carlson Engineered Composites.

Carlson Engineered Composites employs several processes to minimize risk for both the staff and environment at the 692 Mission Street facility. They are as follows:

1) An Acetone Recycling station is located onsite outside the facility where product is recycled to maximize any reusable product within the processes and minimize use of virgin product when not necessary. This facility is enclosed and has a burm around it for containment.
2) Over the past several years the organization has investigated safer portable containment within the facility and has been steadily replacing all containers with spill and fire proof containers that are used for product transfer and storage.
3) Emergency Spill Kits are located throughout the facility and can be used to contain any potential product spills that could occur.
4) At Carlson Engineered Composites request the Winnipeg Fire Inspection Branch has participated in an inspection of all areas of the plant and yard whereby recommendations were made for product storage and further containment.
5) In response to product quantities within the facility and storage areas, it was determined that reducing stock and increasing turns of chemical product from our suppliers would assist us in addressing not only the potential of chemical related issues but also address potential shelf life issues.
6) Employing a Chemical Waste Company has also been a valuable asset to ensure the removal of waste products occurs on a scheduled basis to minimize any excess of chemical which could inadvertently contribute to a spill.
7) Product Cabinets have been added to several departments for containment of any reactive materials to ensure safe storage and to minimize any risk of spills or discharge etc.

8) Carlson Engineered Composites has been working to update any required spill and or fire procedures along with response drills and will continue to do so to ensure appropriate storage, handling and response to all chemical related issues on site.

Best Regards,

Derek Armstrong
Director of Human Resources
Carlson Engineered Composites
204-940-4714
204-330-8768
darmstrong@carlsongrpco.com

STATUS OF TITLE

Title Number	**2118869/1**
Title Status	**Accepted**
Client File	61485-7

The Property Registry
A Service Provider for the Province of Manitoba

1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

OAKCASK INCORPORATED

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

FIRSTLY: LOT 5 PLAN 11084 WLTO
IN LOT "F" ROMAN CATHOLIC MISSION PROPERTY

SECONDLY: ALL THAT PORTION OF LOT 1 PLAN 11084 WLTO
WHICH LIES BETWEEN THE STRAIGHT PRODUCTIONS NLY OF THE
EASTERN AND WESTERN LIMITS OF SAID LOT 5
IN LOT "F" ROMAN CATHOLIC MISSION PROPERTY

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*.

2. ACTIVE INSTRUMENTS

Instrument Type:	**Caveat**
Registration Number:	**220178/1**
Instrument Status:	**Accepted**
Registration Date:	1971-09-30
From/By:	MAN. HYDRO ELECTRIC BOARD/MAN. TELEPHONE SYSTEM
To:	
Amount:	
Notes:	No notes
Description:	No description

STATUS OF TITLE

Title Number 2118870/1
Title Status Accepted
Client File 61485-7

The Property Registry
A Service Provider for the Province of Manitoba

1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

OAKCASK INCORPORATED

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

FIRSTLY: LOT 6 PLAN 11084 WLTO
IN LOT "F" ROMAN CATHOLIC MISSION PROPERTY

SECONDLY: ALL THAT PORTION OF LOT 1 PLAN 11084 WLTO
WHICH LIES BETWEEN THE STRAIGHT PRODUCTIONS NLY OF THE
EASTERN AND WESTERN LIMITS OF SAID LOT 6
IN LOT "F" ROMAN CATHOLIC MISSION PROPERTY

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*.

2. ACTIVE INSTRUMENTS

Instrument Type:	**Caveat**
Registration Number:	**220179/1**
Instrument Status:	**Accepted**
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To:	
Amount:	
Notes:	No notes
Description:	No description

Property Owner's Knowledge of CEC's Fibreglass Operations

In 2008, Oakcask Incorporated purchased the property at 680-692 Mission Street from Sun-X Limited and in doing so, assumed all provisions making up the lease agreement between Sun-X and Carlson. Included in the lease in paragraph 4.09 is the property owner's approval to use the facility for the purpose of manufacturing fibreglass parts with office and storage of related goods. Since the acquisition of the property, Mr. Corrado DalMaso, owner of Oakcask, has visited the location on several occasions, touring the facility and meeting with the Executive Group at the company. Mr. DalMaso and Carlson have negotiated extensions to the original lease in 2010 and then again in 2015. Currently, the lease runs through 2022 and includes options for two, five year extensions.

Ken MacKenzie, CA
CFO and Controller
The Carlson Group of Companies