

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Carlson Engineering Composites Inc.
PROPOSAL NAME: Carlson Engineering Composites
CLASS OF DEVELOPMENT: 1
TYPE OF DEVELOPMENT: Manufacturing -
CLIENT FILE NO.: 5794.00

OVERVIEW:

Manitoba Conservation and Water Stewardship received a Proposal on June 8, 2015 for the continued operation of engineered composites manufacturing facility at 692 Mission Street in Winnipeg, Manitoba. The facility manufactures fiberglass reinforced polymers products using various molding processes.

The Department, on September 25, 2015, placed copies of the Proposal in the Public Registries located at Legislative Library (200 Vaughan Street), the Winnipeg Millennium Public Library in Winnipeg and online at <http://www.gov.mb.ca/conservation/eal/registries/5794carlson/index.html>. Copies of the Proposal were also provided to the Technical Advisory Committee (TAC) members. A notice of the Environment Act proposal was also placed in the Winnipeg Free Press on September 26, 2015. The newspaper and TAC notifications invited responses until October 26, 2015.

COMMENTS FROM THE PUBLIC:

No Comments

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

No Comments.

Manitoba Agriculture – Land Use Branch

No Response.

Manitoba Conservation and Water Stewardship –Compliance and Enforcement Branch

Environmental Compliance and Enforcement (Central Region) has reviewed Environment Act Proposal (EAP) as provided by the applicant.

- *Please identify any pollution control devices in use to reduce the impacts of the emissions of the VOCs that have been identified in the proposal;*

- *With respect to the acetone recycling unit, please provide more information on the process used, including handling of the products and any air emissions control devices that are used in the process*

Proponent Response (November 10, 2015)

This letter is to provide you further information as was the request received on November 2nd, please find the data below:

1st Comment:

No control of emission of styrene and VOC by pollution control device(s) is in place. Instead, Carlson Engineered Composites uses process changes to control emissions as described in the report. In comparison with open moulding, the use of light resin transfer moulding, also known as “closed moulding” has increased from 0% at the start-up of the company to approximately 60% at present, with a tendency of further increase where applicable. “Closed moulding” reduces emissions of styrene by more than 40% and of clean-up solvents by almost 90%.

Direct pollution control by add-on control devices, e.g., oxidizers or columns with activated carbon is not practiced in the industry because of the relatively low concentration of volatile pollutants in emission streams.

2nd Comment:

The following is a short description of the operation of the Acetone Recycling Unit (Finish Thompson’s Solvent Recycling System, LS Series, Model LS - 55IIE):

- Spent acetone is collected in the plant in 19 L (5 gallon) containers and moved outside to the staging area in the immediate vicinity of the acetone distillation unit.
- The containers are emptied into a larger (170 L, 45 gallon) container inside the distillation unit enclosure through a fine mesh strainer.
- Acetone in the 190 L (45 gallon) container is transferred into the distillation unit using an air operated diaphragm pump for batch distillation.
- The distillation unit processes one 190 L (45 gallon) batch in approximately 8 h.
- Distilled acetone is condensed by a glycol heat exchanger located within the enclosure.
- Following the batch distillation, clean acetone is pumped into a 45 gallon drum.
- Required amounts of distilled and recovered acetone are ladled out of the 45 gallon drum into a pail for use inside the plant as required.
- Sludge and other residues from the distillation unit is collected in a disposable plastic bag at the bottom of the column and disposed off-site by a licenced hazardous waste management contractor
- Fugitive acetone vapour from the unit enclosure is discharged outside using a 600 CFM exhaust fan on the top of the enclosure. Exhausted air is replenished with fresh air supplied through a screened opening on the wall.

Physical dimensions of the unit are:

3.3 m (131 in.) width; 1.0 (40 in.) depth and 1.5 m (60 in.) height. It sits on a concrete pad equipped with a spill containment area in front of the unit. More details on the units are provided in the Instruction Manual available for review on request. Carlson Engineered Composites has obtained all the required approvals for the Acetone Recycling Unit and is in compliance with the

health and safety regulations applicable to the unit. Workers operating the unit are trained in-house as required.

Environmental Compliance and Enforcement (November 17, 2015)

Environmental Compliance and Enforcement (Central Region) has reviewed Environment Act Proposal (EAP) Response provided by the applicant.

- *It is noted that the development does not currently employ pollution control devices to reduce emissions of VOC's from the process. ECE requests a clause in the licence be included to address odour concerns from VOCs, should odours become an issue in the future.*
- *It is noted that the waste from the Acetone Recycling Unit is removed by a licenced Hazardous Waste contractor. There are no concerns with this practice. ECE requests that a clause requiring proper Hazardous Waste handling at the development be included in the licence.*

Disposition

Clauses 9 and 11 of the draft Environment Act Licence address odour nuisances and request measures to reduce VOC emission while Clause 30 require proper hazardous waste handling.

Manitoba Conservation and Water Stewardship – Air Quality Section

Air Quality Section has reviewed the above proposal and provides the following comments:

- *Based on the submitted information and our SCREEN3 model results, it is expected that the concentration of all concerned pollutants will be well within the air quality guideline. Therefore, it is expected that the proposal has no significant impact on the facility's surrounding air quality.*

Manitoba Conservation and Water Stewardship – Wildlife and Fisheries Branch

No Concerns

Manitoba Conservation and Water Stewardship – Parks and Protected Spaces Branch

Parks and Protected Spaces Branch has reviewed the proposal submitted pursuant to The Environment Act for the Request for review/comment - EAP Carlson Engineering Composites - File: 5794.00. The Branch has no comments or concerns to offer as it does not affect any provincial parks, park reserves, ecological reserves, areas of special interest or proposed protected areas.

Manitoba Conservation and Water Stewardship – Forestry Branch

No Response.

Manitoba Conservation and Water Stewardship – Aboriginal Relations Branch

No Response.

Manitoba Conservation and Water Stewardship – Lands Branch

No Concerns.

Manitoba Conservation and Water Stewardship – Water Quality Management Section

No Response.

Manitoba Conservation and Water Stewardship – Groundwater Management Section

No Response.

Manitoba Conservation and Water Stewardship – Office of Drinking Water

No Concerns

Manitoba Conservation and Water Stewardship– Water Use Licensing Section

No Response.

Manitoba Conservation and Water Stewardship – Water Control Works Licensing Section

No Concerns

Manitoba Conservation and Water Stewardship– Climate Change and Air Quality Branch

No Response.

Manitoba Municipal Government – Community Planning Services Branch

No Response.

Manitoba Culture, Heritage and Tourism – Heritage Branch

No Response.

Manitoba Municipal Government – Energy Division

No Response.

Manitoba Municipal Government – Petroleum Branch

No Response.

Manitoba Infrastructure and Transportation – Flood Forecasting Branch

No Response.

Manitoba Infrastructure and Transportation – Highway Planning and Design Branch

No Concerns.

Manitoba Intergovernmental Affairs

No Response.

Manitoba Health – Environmental Health Unit

No Response.

Manitoba Labour – Office of Fire Commissioner

The Office of the Fire Commission recommends that an updated Fire Safety Plan be submitted to the Winnipeg Fire Department for their review.

Manitoba Labour – Work Place Safety & Health

No Response

PUBLIC HEARING:

A public hearing is not recommended.

CROWN-INDIGENOUS CONSULTATION:

The Government of Manitoba recognizes that it has a duty to consult in a meaningful way with Indigenous communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of the Indigenous rights of that community.

This facility is an existing engineered composites manufacturing facility located on a private land within the boundary of the City of Winnipeg. There would be no infringement of aboriginal or treaty Indigenous rights under Section 35 of the Constitution Act, 1982. Therefore, it is concluded that Crown-Indigenous consultation is not required for the project.

RECOMMENDATION:

The Proponent should be issued a Licence for the continued operation of engineered composites manufacturing facility at 692 Mission Street in Winnipeg in accordance with the specifications,

terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Environmental Compliance and Enforcement Branch of Manitoba Conservation and Water Stewardship.

A draft Environment Act Licence is attached for the Director's consideration.

Prepared by:

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November 17, 2015

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