09 May 2017

Client File No.: 4320.00
License No.: 69HW

Government of Manitoba
Manitoba Sustainable Development, Environmental Approvals
160-123 Main Street
Winnipeg, Manitoba R3C 1A5

Attention: Ms. Cory Switzer, P.Eng. Environmental Approvals

Reference: Notice of Alteration Form
Dangerous Good Handling and Transportation Act License – 69HW RR
Addition of Shale Bin for Rinsing Vacuum Trucks – Non-regulated Materials
1090 Kenaston Boulevard
Winnipeg, Manitoba

INTRODUCTION

GFL Environmental Inc. (GFL) submits this letter, completed Notice of Alteration, and enclosed supporting documentation regarding the proposed operations at GFL's 1090 Kenaston Boulevard location in Winnipeg, Manitoba. (MB). The completed Notice of Alteration Form is provided in Attachment A. License No. 69HW was originally issued on 04 September 1998 with updates published in 2001 and 2002. The original license application was for the collection, processing and blending of used lubricating oil and flammable waste liquids. Market conditions, applicable regulations and industry standards have changed since the original license application and consequently, GFL is looking to expand its service offerings in Manitoba similar to the current operations in our Saskatoon, Saskatchewan office. A Notice of Authorization for Acceptance of Additional Waste Classes was prepared for and approved by Manitoba Sustainable Development in their letter dated 29 March 2017. GFL requests this additional Notice of Alteration be in place until 31 December 2017, at which time a new license will be complete and come into force. A timeline for the submission of a new application for the GFL Winnipeg operations is noted below.

A forecasted operational revision is summarized below.

SHALE BIN FOR RINSING VACUUM TRUCKS

GFL has recently acquired a dedicated vacuum truck for the recovery of non-regulated fluids mixed with solids from car wash pits, oil-water separators, manholes, sumps, septic tanks, daylighting projects, etc. Liquids collected will be transported for off-site disposal or for the on-site treatment in the Wastewater Treatment Plant (WTP) depending on the physical characteristics of the materials received. Solids remaining in the interior of the vacuum truck vessel need to be rinsed out with pressurized water following the decanting of liquids to ensure the vessel is clean and operationally ready for subsequent projects.

Shale Bin and Containment Design

A manufactured shale bin will be purchased by GFL upon acceptance of the Notice of Alteration. The bin will be constructed of a minimum of 5 millimeter (mm) thick steel plate, with dimensions of approximately 6.4 meters (m) long, 3.3 m wide with 1.5 m high side walls on three sides and a sloping floor. Prior to installing the bin, the surface where the bin will be located will be graded smooth, mechanically compacted and bedded with approximately 100 mm of coarse granular materials for foundational stability. A 30 mil high density polyethylene (HDPE) liner with geotextile fabric backing will be placed above the granular material with side curbs to contain any materials splashed during the rinsing process. The liner will be protected with a minimum of 50 mm of crushed granular

materials followed by lumber dunnage. The shale bin will be placed on top of the lumber dunnage to ensure stability of the bin and protection of the HDPE liner.

Pressurized Water for Rinsing

Once the liquids have been decanted, the vacuum truck will back into the three sided bin, elevate the truck vessel, and open the rear hatch. As standard policy for GFL, personnel are prohibited from entering the open vessel during the rinsing program.

Treated pressurized water will be provided to the shale bin from the Water Treatment Building using a commercial water pump and fire nozzle. The pressurized water will be directed into the vessel and any remaining solids will be rinsed out. Following rinsing, water and solids collected in the bin will be allowed to settle with the recovered water returned to the WTP for subsequent treatment. Utilizing treated water from the WTP allows GFL to recycle and recover all water for reuse during the rinsing program. It is estimated that between 200 and 500 litres of recycled water will be required to rinse out the vacuum truck. Following treatment in the WTP, the water will be available for the shale bin for subsequent rinsing. City of Winnipeg supplied potable water will not be used for the rinsing of the vacuum trucks.

Solids Management and Disposal

Solids recovered during the rinsing program will be allowed to settle and dewater until they are a dry stackable material. Once the materials are dry stackable, representative samples will be collected and submitted for laboratory analysis to characterize the physical and chemical characteristics to determine appropriate disposal locations. Upon receipt of the analytical results, characterized solids will be loaded with a skid steer from the shale bin into an end dump trailer and transported off-site for final disposal. As the projects involve the handling on non-regulated materials, it is believed that the solids generated during this process will be classified as non-hazardous. Wastes determined from the analytical sampling program to be hazardous will be disposed of at a waste facility approved for the acceptance and disposal of hazardous materials.

Approximately 0.5 to 2 cubic meters (m^3) of solids are estimated to be generated per day, depending on the nature of the projects completed, amount of solids recovered, and the scheduling of the vacuum truck. Based on current projections, it is estimated that a maximum of 10 m^3 of non-regulated dry solids will be generated for month for off-site disposal. Process materials generated or received at the GFL facility will not be permitted in the bin for dewatering.

NEW APPLICATION SUBMISSION

GFL and Manitoba Sustainable Development have been corresponding to update License 69HW RR to reflect the current and forecasted operations. During the 14 February meeting it was confirmed by Manitoba Sustainable Development that a new License application should be prepared to ensure all current and proposed activities are under the conditions of current regulations. GFL has commenced on the preparation of the new application and proposes to have the application documents submitted to Manitoba Sustainable Development for their review and comment on or before 30 May 2017. This allows substantial time for necessary revision and resubmission of documents prior to the expiry of the Notice of Alteration on 31 December 2017.

CLOSURE

Please contact me if you have any questions regarding the enclosed or require any further information.

Glen J. Weisbrod, P.Eng.
Regional Manager, Environmental Sciences and Remediation Services

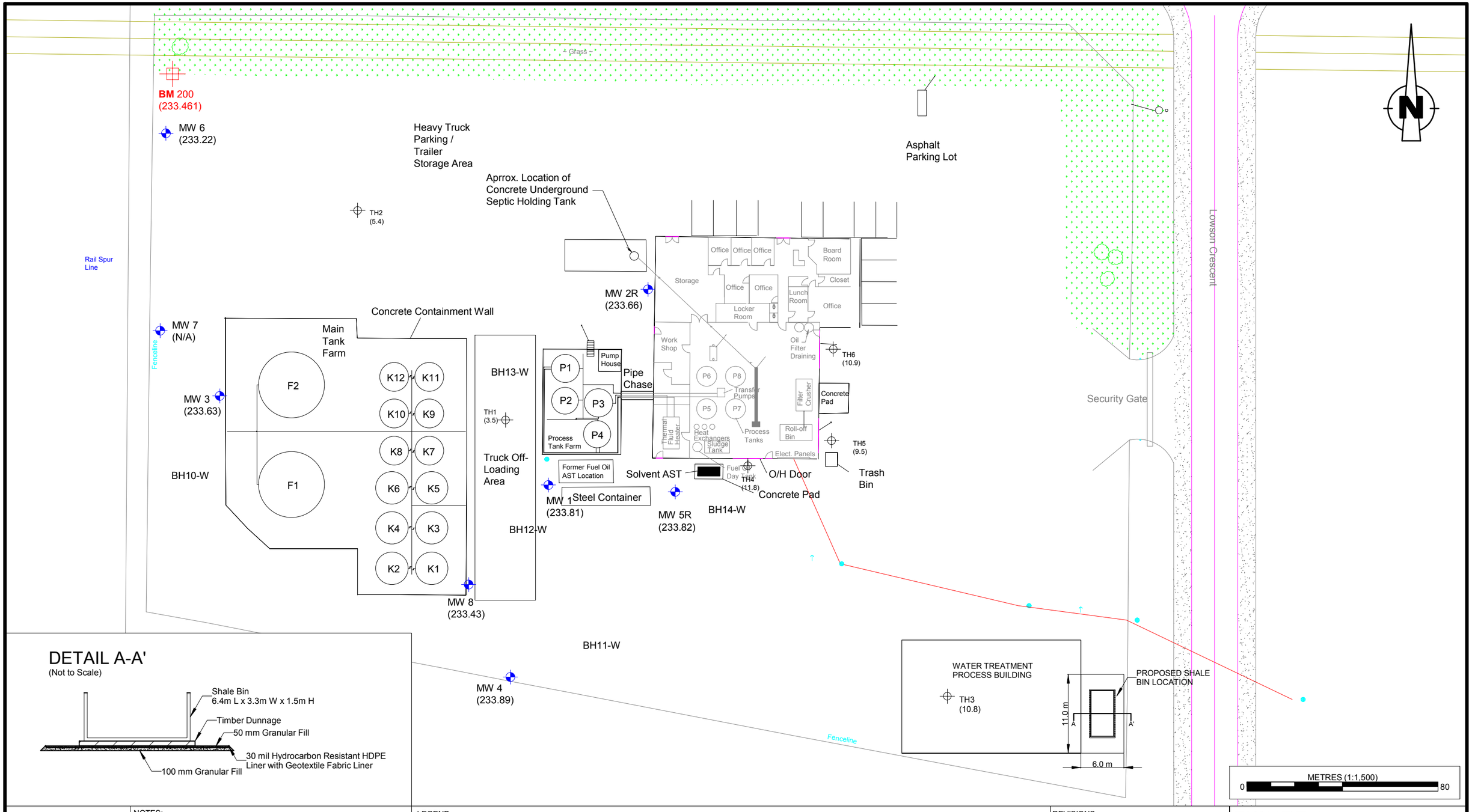
Attachments:

Attachment A – Notice of Alteration Form

Figures:

Figure 1 – Proposed Shale Bin Layout

FIGURES



DETAIL A-A'

(Not to Scale)

NOTES:

1. THIS DRAWING IS PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. THIS IS NOT A LEGAL SURVEY. ALL MEASUREMENTS ARE IN METRES.
2. SITE COORDINATES: 49.838888° N, -97.208127° W.

LEGEND:

REVISIONS

REVISED BY / DATE
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FIGURE 1

PROPOSED SHALE BIN
LAYOUT #1

21 APRIL 2017
GFL WINNIPEG SHALE BIN
1090 KENASTON BLVD, WINNIPEG, MB

DRAWN BY: SAM

CHECKED BY: GJW

Attachment A:

Notice of Alteration Form

Notice of Alteration Form

Dangerous Goods Handling and
Transportation Act Licence

Manitoba
Sustainable Development

Client File No. : 4320.00	DGH&TA Licence No. : 69HW RR

Legal name of the Licencee: GFL Environmental Inc.

Name of the FACILITY: 1090 Kenaston Blvd, Winnipeg, Manitoba

Type of Activity: Installation and operation of a three sided shale bin for rinsing our vacuum truck to remove non-regulated solids. Solids will be dewatered and disposed.

Licencee Contact Person: Glen J. Weisbrod, P.Eng., Regional Manager - Environmental Services
Mailing address of the Licencee: PO Box 25055
City: Saskatoon Province: Saskatchewan Postal Code: S7K 8B7
Phone Number: (306) 244-9500 Fax: Email: gweisbrod@gflenv.com

Name of proponent contact person for purposes of the environmental assessment (e.g. consultant):
Glen Weisbrod, P.Eng., Regional Manager - Environmental Services

Phone: (306) 244-9500 Fax:	Mailing address: Site 414, Comp9, RR 4 Main Saskatoon, SK, S7K 3J7

Email address: gweisbrod@gflenv.com

Description of Alteration *(max 150 characters):*

See attached cover letter outlining proposed design, operation and procedure for rinsing solids from our newly acquired vacuum truck.

Date: 2017-05-09	Signature: 20170509 Printed name: Glen J. Weisbrod, P.Eng., Regional Manager

PROVINCE OF MANITOBA
G.J. WEISBROD
Member
32566
PROFESSIONAL ENGINEER

A complete Notice of Alteration **(NoA)** consists of the following components:

- ☑ **Cover letter**
- ☑ **Notice of Alteration Form**
- ☑ **4 hard copies and 1 electronic copy of the reports/plans supporting the alteration to the facility**

Submit the complete NOA to:

Director
Environmental Approvals Branch
Manitoba Sustainable Development
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/sd/eal