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Ref. No.: 3315446-000.700

January 13, 2016

Ms. Tracey Braun
Director
Manitoba Conservation and Water Stewardship
Environmental Approvals
2nd Floor, 123 Main Street
Winnipeg MB R3C 1A5

Dear Ms. Braun:

RE: Summary of Work Completed – Environment Act Licence #2634 to Allow for a One Time Landfill Disposal of Wastewater Lagoon Solids

Introduction

MMM Group Limited (MMM) was retained by the Rural Municipality of Springfield (RM of Springfield) to complete a Notice of Alteration for Environmental Act License #2634 (EAL #2634) to allow for a one time landfill disposal of raw solids from the RM of Springfield Regional Lagoon located at NE11-11-05EPM to Prairie Green Landfill (EAL #2177E RRRR), a subsidiary of Progressive Waste Solutions. Manitoba Conservation and Water Stewardship (MCWS) approved the Notice of Alteration on November 23, 2015.

Summary of Landfilling Solids

On December 7, 2015, Assiniboine Injections removed raw solids from the RM of Springfield east and west lagoons. The solids material had been excavated from the truck unloading ramps the week prior and deposited on the sides of the lagoons, within the lagoon liner, in order for moisture to weep out and the material to dry further. MMM was on-site during the removal process for observation and monitoring purposes.

Assiniboine Injections used three tandem dump trucks and an excavator in order to complete the excavation and hauling of solids material. Twelve truck loads were hauled to Prairie Green Landfill for disposal. Of the twelve truckloads, seven loads included material from the east cell and five from the west cell. The solids material had dried sufficiently and appeared to be composed primarily of sand. The excavator was used to clean up the Site after the last truck had departed. No major spills of material were observed during the excavating or hauling procedures.

The total solids that were hauled to the Prairie Green Landfill was 235.16 metric tons.

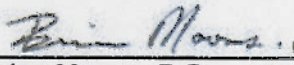
Conclusions

MMM was retained by the RM of Springfield to complete a Notice of Alteration for EAL #2634 for a one-time landfill disposal of lagoon solids. The work has been completed as per MCWS approval letter and 235.16 metric tons of solids material was deposited at the Prairie Green Landfill on December 7, 2015. As well as per condition seven of said letter, the RM of Springfield is making arrangements to determine the possible causes of elevated metal concentrations found in the sludge of the primary lagoon cells.

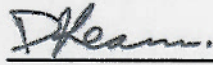
Yours truly,

MMM Group Limited

Reviewed by:



Brian Moons, B.Sc.
Biologist
Dated: January 13, 2016



Darren Keam, M.Sc., P.Ag.
Project Manager
Dated: January 13, 2016

cc.: Mr. Rob Boswick (MCWS)
Mr. Justin Magne (RM of Springfield)

Attachments

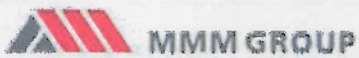
BM/tc



Photo 1. Excavation of dried solids for removal in east cell.



Photo 2. Tandem dump truck to haul solids to Prairie Green Landfill.



Date Taken: December 7, 2015	Client: RM of Springfield
Taken by: B. Moons	Location: RM of Springfield
Project No.: 3315446	



Photo 3. Completed east cell.



Photo 4. Completed west cell.



Date Taken: December 7, 2015

Taken by: B. Moons

Project No.: 3315446

Client: RM of Springfield

Location: RM of Springfield

Table 1. Summary of Truck Hauling

Ticket No.	Departure time from lagoon	Arrival time at landfill	Departure time from landfill	Material weight (Metric tons)
939497	9:30	10:14	10:33	18.75
939499	9:45	10:26	10:39	18.49
939505	9:55	10:37	10:53	17.22
939539	11:25	12:04	12:17	18.02
939545	11:35	12:17	12:29	19.33
939553	11:45	12:23	12:38	16.70
939595	13:05	13:45	13:57	21.54
939601	13:15	13:57	14:09	20.88
939606	13:30	14:03	14:18	16.57
939641	14:45	15:21	15:34	21.40
939646	14:55	15:33	15:45	24.89
939655	15:20	15:59	16:11	21.37



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