



MCCAIN FOODS (CANADA)
**EIA Registration and WSSA
Application – McCain Florenceville-
Fry Plant (Final)**

New Brunswick Department of Environment and Local
Government





December 1, 2016

New Brunswick Department of Environment and Local Government
Marysville Place
20 McGloin Street
PO Box 6000, Fredericton, NB
E3B 5H1

Attention: Ms. Lee Swanson, B.Sc., M.A.
Environmental Assessment Section – Project Manager

***Environmental Impact Assessment Registration and Water Supply Source
Assessment Application – McCain Foods (Canada) Florenceville Facility***

Dear Ms. Swanson,

We are pleased to present a final copy of the Environmental Impact Assessment (“EIA”) Registration and Water Supply Source Assessment (“WSSA”) Application for the above-noted project. This document is being submitted to NBDELG on behalf of McCain Foods (Canada) (“McCain”) as part of the initial application for a WSSA.

Sincerely,

DILLON CONSULTING LIMITED

A handwritten signature in blue ink, appearing to read "Malcolm Marston".

Malcolm Marston, P.Eng., LEED AP, EP (CEA), EP (EMSLA)
Partner

BCG:trw

Enclosure(s)

cc: Mr. Peter Cormier, P.Eng. – McCain Foods (North America)

Our file: 16-4438

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1.0 The Proponent

1.1 Name of the Proponent

McCain Foods (Canada), a Division of McCain Foods Limited – Florenceville-Bristol, NB Facility.

1.2 Project Manager

McCain Foods North America

Mr. Peter Cormier, P.Eng.

Manager of Environmental Engineer

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1.3 Principle Contact Person

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Project Manager

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1.4 Property Ownership

As shown on the attached **Figure 1**, the McCain Florenceville Facility (herein “the facility”) is located at 107 Main Street in Florenceville-Bristol, New Brunswick. The plant is legally identified by property identification (PID) numbers 10083400, 10223485, 10083467, and 10083541 and is owned by McCain Foods Limited.

2.0 The Undertaking

2.1 Name of the Undertaking

Water Supply Source Assessment for the McCain Foods (Canada) Facility in Florenceville-Bristol, New Brunswick.

2.2 Project Overview

A WSSA is being proposed at the facility to identify a potential groundwater source capable of supplementing the anticipated increase in water demand associated with the overall facility water demand.

2.3 Purpose/Rationale/Need for the Undertaking

The intention of the proposed WSSA is to upgrade current infrastructure/capacity at the facility in order to supplement potential current and/or future increases in facility water demand.

2.4 Project Location

The proposed WSSA will be completed at the McCain Foods plant in Florenceville-Bristol, New Brunswick. Proposed drill targets for the WSSA are located on the facility portion of the property; drill targets are greater than 50 m from the adjacent Main Street and greater than 100 m from the Saint John River. The proposed drill targets are located on PID No. 10083400.

The locations of the proposed drill targets and existing known water wells are shown on **Figure 2**, attached.

2.5 Physical Components of the Project

2.5.1 Current Conditions/Consumption

Currently, the Prepared Foods Plant (“PFP”) and the Data Centre are provided water by the “PFP Well” and the “Data Centre Wells” respectively. A WSSA completed at the PFP by Dillon in 2014 recommended a safe consumption rate of no less than 860 m³/day for the PFP Well, the Data Centre Well was not included in that assessment. The current proposed WSSA does not include upgrade/changes to the PFP and/or Data Centre water systems; however, the Data Centre and PFP Wells may be used as observation points for the proposed WSSA.

The fry plant currently sources water for its operations from the adjacent Saint John River and then undergoes treatment. The facility currently uses, on average, 3,300 m³/day. The current treatment infrastructure for the facility has a nominal treatment capacity of 4,000 m³/day.

The capacity of the existing water supply treatment infrastructure is highly dependent upon the Saint John River water quality. Instances have occurred in the past where river water quality in the spring or late summer has caused shutdowns or decreased production at the facility.

2.5.2 Proposed WSSA Components

2.5.2.1 Exploration and Initial Yield Assessment

The exploration and initial yield assessment activities will consist of:

- installing up to two 150 mm diameter test/observation wells will be installed in the locations identified on **Figure 2** to explore the potential for a supplemental groundwater supply and will remain in place and used as observation wells throughout the hydraulic testing;
- perforating the test/observation well casing along the zone of highest potential for well yield and initial well yield testing will be performed using air lift methods; and
- collecting samples from intervals through the zones of interest to be analyzed for grain size distribution.

If the initial testing suggests a high potential for the desired quality and quantity (~1,635 m³/day) of water, a larger diameter production well including a screen will be designed based upon these results.

2.5.2.2 Drilling, construction and commissioning of new water supply well

If the available surface water supply does not prove to be sufficient in maintaining the required demand of the overall facility McCain may initiate the development of the identified groundwater supply consisting of:

- installing one larger diameter production well in the location identified by the test/observation well drilling and the results based design;
- conducting step-drawdown testing and a 72 hour pumping test as per Section 3 of the NBDELG EIA WSSA Guidelines; and
- preparing a report summarizing the findings of the WSSA and submitting it to NBDELG.

As per the New Brunswick Clean Water Act, construction of the wells will be carried out by a licensed New Brunswick Water Well Contractor and licensed well driller. Well construction will be completed in a manner which complies with the minimum well construction, location, safe yield, and reporting requirements as specified in the New Brunswick Water Well Regulation. Dillon staff will be onsite during well drilling and installation.

2.5.3 Estimated Project Schedule

The proposed WSSA will be initiated by the drilling of the test/observation wells in late 2016. A brief, estimated schedule for the proposed WSSA is as follows:

- Construction of Observation Wells – Approximately 0.5 Week – To be completed in Late Fall/Early Winter 2016
- Public Consultation – To be completed upon decision to proceed with water supply development
- Construction of Production Well – Approximately 1 Week
- Onsite Hydraulic Testing – Approximately 1 Week
- Reporting – Approximately 2-3 Weeks

3.0 Description of Existing Environment

The project site is industrial and developed, and the surrounding land uses are mostly residential and institutional. Additional disturbances (with the exception of well installation) will not be required.

3.1 Groundwater Environment

It is anticipated that the wells will be drilled within a potentially high yielding sand and gravel glacio-fluvial outwash deposit along the inside meander of the Saint John River. It should be noted that high yielding wells have been historically located at the facility, however they were decommissioned in 2007 due to their location relative to a previous plant expansion. There have been no known issues related to water quality or quantity impacting neighbouring properties related to the operation of the former wells.

The subject property is not located in a wellfield protection area under the New Brunswick Wellfield Protection Program or a designated watershed under the New Brunswick Watershed Protection Program.

There are no protected natural areas or provincially significant habitats located in the area of the proposed WSSA activities.

3.2 Freshwater Environment

There are no watercourses on the subject property; however, the Saint John River is located approximately 50 m west of the plant property limits. An un-named tributary is also located approximately 200 m south-east of the nearest proposed drill target (Proposed Drill target #2).

Based on GeoSNB mapping, there are no regulated or provincially significant wetlands located within the vicinity of the property.

4.0 Environmental Effects and Mitigation

4.1 Assessment of Environmental Effects

Based upon the industrial nature of the plant, and since the well construction/testing activities will be carried out on fully developed areas (i.e., landscaped or paved), interaction with the environment will be minimal.

Discharge water during well development and hydraulic testing will be of higher quality than the typical discharge as it will not be processed in any way prior to being released to the environment. Because the well constructing/ testing activities will be discharging clean ground water to a storm drain network that discharges to the Saint John River it is anticipated that sedimentation will be negligible.

4.2 Proposed Mitigation

Specific mitigation and best management practices will be observed during the well testing activities, specifically to remain in compliance with the New Brunswick Clean Water Act, MBCA, the SARA and the NBSARA to ensure that adverse environmental effects do not occur. The following mitigation measures will be applied to this project.

Drilling Equipment and other Machinery Use:

- A spill kit (at least one clean-up kit, containing absorbent pads and booms for petroleum spills) will be present with the drilling equipment.
- Equipment will be in good working order and free of leaks.
- Vehicle fuelling and maintenance will occur at least 30 m away from any watercourse.
- Erosion and sediment control structures will follow specifications as outlined in the Watercourse and Wetland Alteration Technical guidelines (Site and Surface Water Management p.19- 21).
- Siltation prevention measures (i.e., silt fence) will be installed at the onset of the construction activities and added wherever necessary.
- Sediment control structures will be monitored and maintained on a regular basis.

Temporary Discharge to Storm Drain:

- Complete periodic observation of the storm water discharge to ensure that an increase in sedimentation does not occur beyond the typical storm event over the course of the hydraulic testing.

4.3 Accidents, Malfunctions, and Unplanned Events

McCain has an emergency response plan as part of its standard operating procedures to address potential accidents malfunctions and unplanned events. For this project, these events relate specifically to the water testing activities of the project. McCain currently has a facility-specific Health and Safety Program for their operations. An on-site job safety plan and environmental assessment will be facilitated prior to the commencement of work to fulfil the obligations of the facility's Safety Program and Environmental Management System (ISO14001).

5.0 Public Consultation

Public consultation will be completed if it is determined that this WSSA is to proceed beyond the exploratory drilling and initial yield testing to the construction, development and commissioning phase of a new water supply well.

Project information letters will be distributed to landowners within approximately 1.0 km of the proposed activities. The purpose of the letter will be to advise local residents and businesses close to the proposed Project site (i.e., those who are potentially most affected) and provide them with opportunity to comment on the proposed undertaking.

Information letters will also be sent to the Town of Florenceville-Bristol and the local MLA.

The notification letters and any potential concerns or responses from the public will be provided to NBDELG.

6.0

Closure

We trust this document meets your current requirements. Should you have any questions, please do not hesitate to reach out to the undersigned.

Respectfully Submitted,

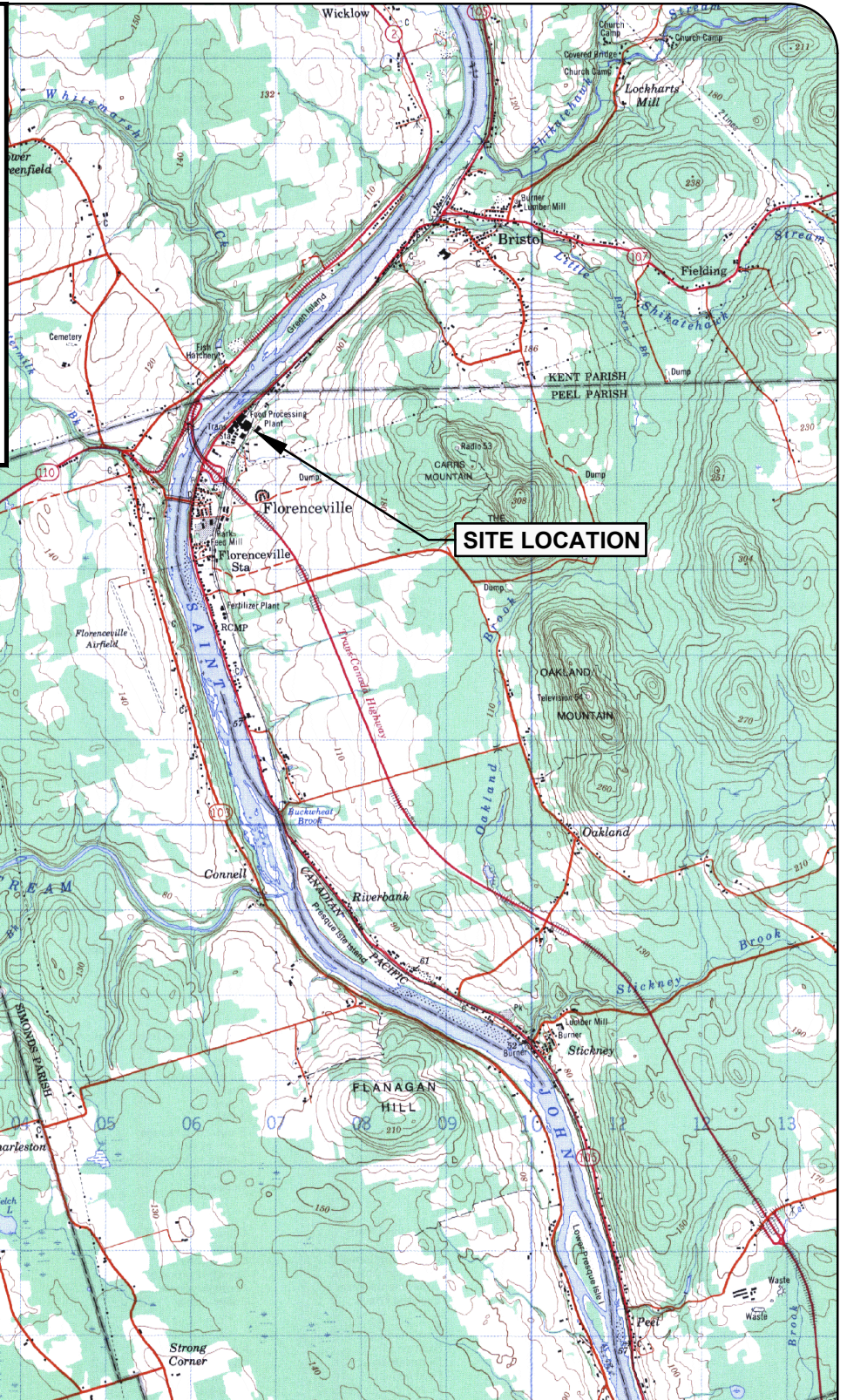
DILLON CONSULTING LIMITED



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Partner

Figures



McCain Foods (Canada)
 EIA REGISTRATION and WSSA APPLICATION
 FLORENCEVILLE,
 BRISTOL, NB

SITE LOCATION MAP
 FIGURE 1

MAP/DRAWING INFORMATION
 National Topographic System Mapsheet 21J/05.

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PROJECT: 16 4438 STATUS: FINAL DATE: 1/12/16



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 FLORENCEVILLE,
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SITE PLAN
 FIGURE 2

- | | | | | | | | |
|-------------|------------------------|-------------|-----------------------------|---|------------------------------------|---|-------------------|
| — · — · — · | SUBJECT PROPERTY LINES | — · — · — · | FORMER STRUCTURE A/G | ⊙ | WELL LOCATION | ○ | DRILL TARGET AREA |
| — · — · — · | PROPERTY LINES | — · — · — · | EXISTING INFRASTRUCTURE U/G | ⊙ | ADJACENT WATER USER (AUGUST, 2014) | | |
| — · — · — · | EXISTING STRUCTURE A/G | — · — · — · | FORMER INFRASTRUCTURE U/G | ⊙ | OBSERVATION WELL | | |

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MAP/DRAWING INFORMATION
 Property boundaries are based on Service
 New Brunswick records and may not be
 exact. This is not a legal survey.
 Imagery source GeoNB Mapviewer.
 CREATED BY: HEB



NOTE:
 INFRASTRUCTURE LOCATIONS ARE
 APPROXIMATE ONLY.
 PROJECT: 16 4438
 STATUS: FINAL
 DATE: 1/12/16

References

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