

**ENVIRONMENTAL IMPACT ASSESSMENT (EIA)**

**NEW BRUNSWICK**

**Presented to**

**Department of Environment and Local Government (DELG)**

**Presented by**



**Gilbert M. Rioux et Fils Ltée**

**P.O. Box 7812**

**Grand Falls, NB E3Z 2E8**

**August 16<sup>th</sup>, 2019**

## **1.0 THE PROPONENT**

### **a) Name of Proponent:**

Gilbert M. Rioux et Fils Ltée

### **b) Address of Proponent:**

855 Route 108, Saint-André, NB E3Y 4A5

PO Box 7812, Grand Falls, NB E3Z 2E8

1-877-999-1764 – 506 473-1764

[Info@gmrioux.ca](mailto:Info@gmrioux.ca)

### **c) Principal proponent contact (e.g., CEO, facility manager, etc.):**

Mélanie R. Desjardins, President

506-473-1764

[melanierdesj@gmrioux.ca](mailto:melanierdesj@gmrioux.ca)

### **d) Principal Contact Person for purposes of EIA (e.g., consultant etc.):**

France Gagnon, Project Coordinator

506-473-1764

[francegagnon@gmrioux.ca](mailto:francegagnon@gmrioux.ca)

### **e) Property Ownership:**

The land and building where the project will take place is own by 618449 NB Ltée. an affiliated company of Gilbert M. Rioux et Fils Ltée; the proponent.

## **2.0 THE PROJECT DESCRIPTION**

### **a) Project Name:**

A Waste Management Solution

### **b) Project Overview:**

The goal of our project is to provide a New Brunswick base site for our customers to be able to destroy out of province beverage products not sold to market in an environmentally friendly way that eliminates any waste created by the destruction of these products.

At Gilbert M. Rioux et Fils Ltée (gmrioux) our main operation is trucking but we also operate a recycling center and a processing facility for recyclables. At our processing center we collect, crush and bale plastic, aluminum and glass beverage containers from across New Brunswick. The processed material is then shipped to various vendors for further transformation. As well, through our business experiences, we have developed partnerships with NB base customers to empty and process their full beverage containers.

This project would entail gmrioux to transport beverage containers not sold to market in our trailers to our processing facility in Grand Falls, NB where we currently already process recyclables. Once the trailer is on site and unloaded, employees from the processing facility will be required to manipulate the products to remove the liquid from the containers using different procedures as described in detail further in this registration document. The liquid will then be pumped into a tanker trailer and transported to a local third-party for further processing and recycling of the product. The containers will be processed as well and sent to various suppliers for further transformation.

In summary our project is to be a New Brunswick base waste management solution for non-hazardous liquids from various source.

**c) Purpose/Rationale/Need for the Undertaking:**

Gilbert M. Rioux et Fils Ltée (gmrioux) transports a variety of goods including beverage products from various customers. At certain times these customers have products that need to be destroyed as they cannot be sold to market for various reasons; past expiry date, end of a promotion, etc.. Products will vary from pop, energy drink, juice and beer. Gmrioux customers have notified us of their needs for a disposal/recycler facility in New Brunswick. Approval of this project would not only help us respond to an existing demand but would also augment the flow of products going through our processing facility. Consequently, having higher product volume will require more personnel to process it, which means job opportunities in the area. This could also provide more opportunities with other potential customers that also have a need for product destruction/recycling in New Brunswick.

This is an opportunity not only for gmrioux but also for New Brunswick as our way of processing the liquids eliminates any waste and is environmentally conscious. Our local third-party recycler uses the liquid waste along with other organic matter mixt with manure to create methane gas inside an anaerobic digester which will then be transformed into electricity.

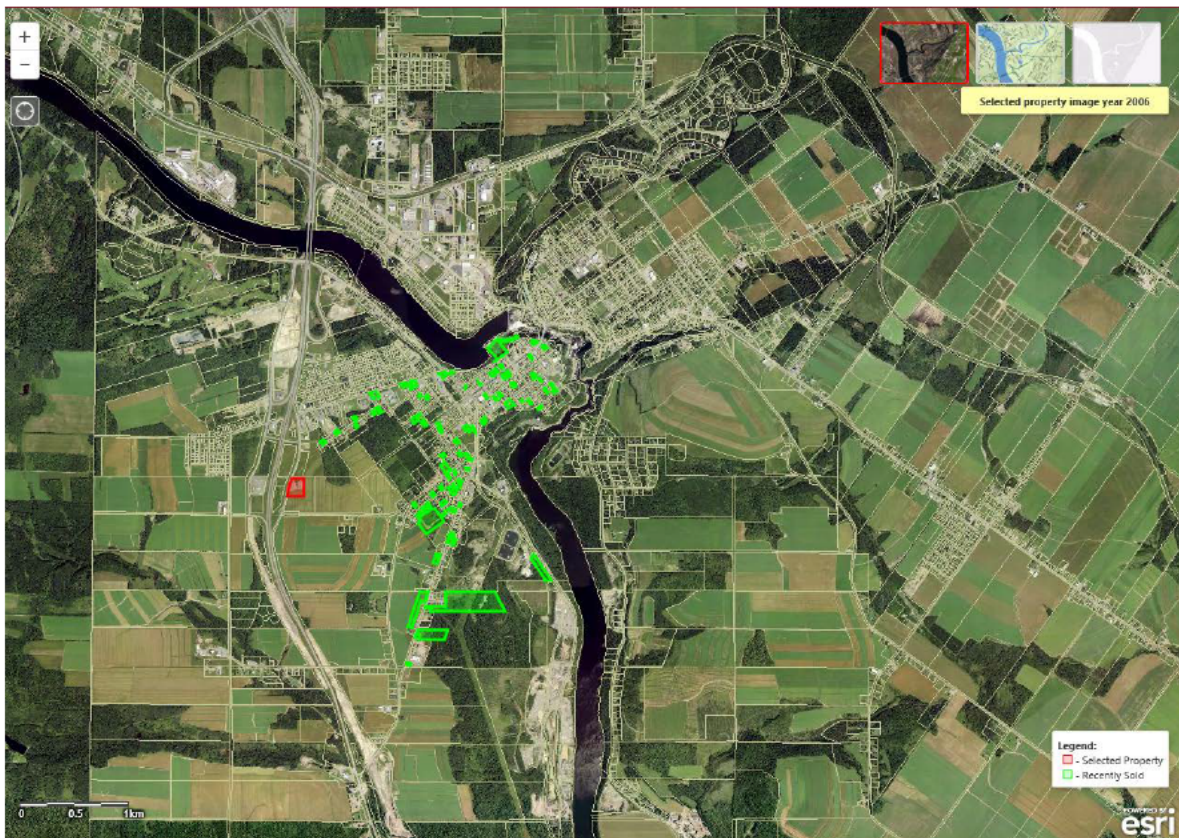
For gmrioux, there is no alternate option, it is an opportunity we want to pursue, especially since we have the infrastructure, the manpower and the process already in place to do the work needed. This project would only have a positive impact on the environment.

#### d) Project Location:

The project will take place at our processing facility located in Grand Falls, NB.



- PID#: 65185068
- Street address: 135 Bélanger St., Grand Falls, NB E3Z 3C9 Canada
- The latitude and longitude: 47.037390, -67.765550
- GPS Coordinates: 47° 2' 14.604" N - 67° 45' 55.98" W



**e) Siting Considerations:**

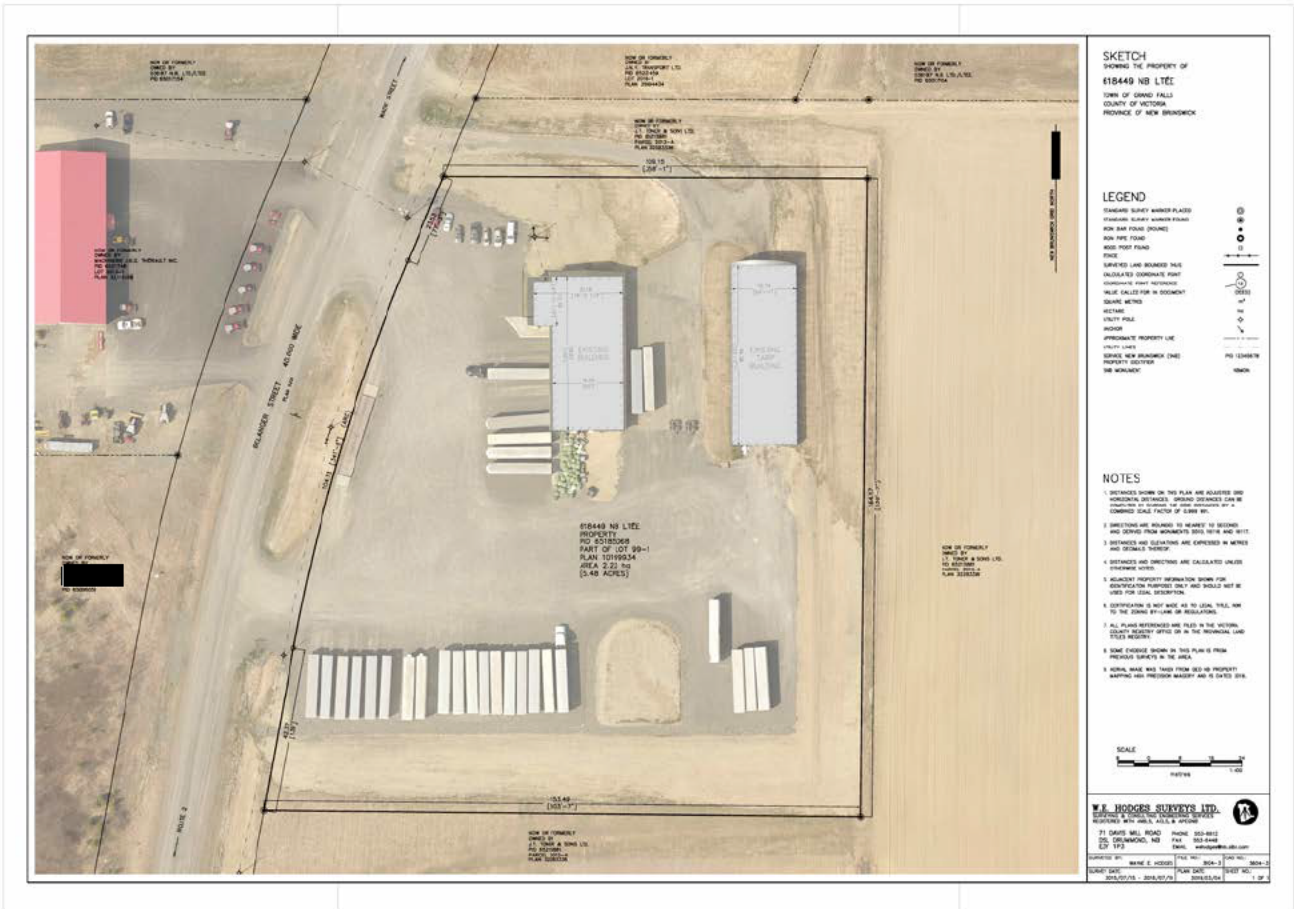
Choosing the location for this project was simple as we already have the infrastructure to accommodate this type of project. Our processing center is already operational and ideally located to accommodate transports.

We are located right off highway 2 at exit 79 with a large yard to allow traffic of multiple trucks. We have 6 interior loading bays and 4 exterior loading bays. Operations would take place mainly inside the building where we are already setup to crush and bale recyclable containers as well as do the removal of liquids.

The site is within the limits of the town of Grand Falls and have municipal water supply to the facility. We have no close neighboring property as our site is mostly surrounded by potato fields. There are no reasonable alternative sites for this project.



f) Physical Components and Dimensions of the Project:



\* Original copy of the site plan included in appendix 1.



- The dimensions of the subject property;

The property is 358'-1" + 538'-7" + 503'-7" + 557'-11"  
 The building is 60'\*130' = 7800sqft

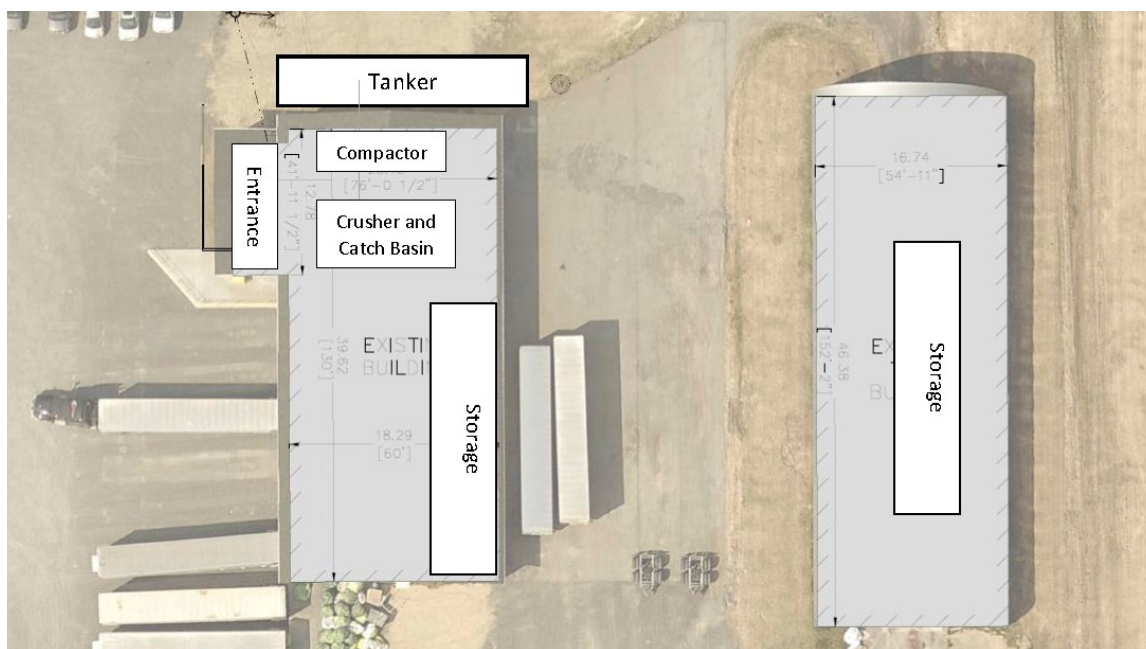
- The total area of the site;

The total site is +/- 260,000sqft (6 acres)

- A description of all physical components, structures and infrastructure required for the project;



For this project we require a building equipped for year-round production and large enough to permit unloading, processing and storage of products. The components required are a catch basin to collect the liquids from the containers, as well as a crusher and a compactor to prepare and condense the containers into movable bales. The catch basin will also be equipped with a pump to evacuate the liquid to a tanker trailer for transportation. No new construction or addition is required to be done for this project.



- The size of the main component(s) (e.g., length of roads, surface area and total floor area of buildings, etc.);

The building floor surface is 60'\*130' and we will be using the entire space.

- A description of the types of activities that may be directly associated with, or may occur as a result of, the construction, operation or maintenance of the undertaking.

The activities directly associated with the operation of this project would be the transportation of the raw product and of the processed product. The project will have no significant impact on the traffic flow going in and out of our facility. We estimate that this would only add one or two truckloads on a weekly basis. Therefore, this will not cause any disruption as the area is already familiar with truck traffic.

**g) Construction Details: NA**



## **h) Operation and Maintenance Details:**

The operations for this project consist of having loads of products taken from either Toronto, Montreal, Halifax or Moncton and brought to our facility in Grand Falls, NB. Product will be offloaded in our warehouse and depending on the type of container the product will be processed following these procedures:

**Glass bottles:** The caps will be removed, and bottles will be emptied in a catch basin. Caps are sent to be recycled. Empty bottles are placed in cases, palletized and sent to be reused. Small bottles could also be dumped directly into a crusher that breaks the bottles (the liquid is automatically caught in the catch basin). The glass and caps are sent to be recycled. The recycler separates the caps from the glass.

**Cans or plastic bottles:** The individual cans or bottles will be put in a tub separately, once the tub is full it will be dumped in a crusher that rips open the cans/bottles (the liquid is automatically caught in the catch basin). The tin cans or plastic bottles will be crushed, baled and sent to be recycled. If cans are in cardboard cases, the cans are removed by hand as the cardboard and tin cans cannot be recycled if mixed. The cardboard is baled and sent to be recycled. The tin cans are crushed, baled and sent to be recycled.

**Catch basin:** The product (liquid) in the catch basin is pumped into a tanker truck. Once the truck is full it is brought to a local 3<sup>rd</sup> party and dumped in a manure catch basin. This 3<sup>rd</sup> party then uses the manure, liquids we dumped plus other organic matter and transfers it to a digester. The digester turns the organic matter to methane gases. The methane gases are burned, the burning process turns their generators and creates electricity.

Daily visual inspections are done to verify the various components of the equipment. Employees also verify oil levels and sensors.

- **State the estimated daily water use and the source of the water supply;**

Our water usage is minimal, it is mostly only use when a cleanup is needed (washing floor and equipment). For this project, water usage would be after multiple unloading of large shipment for cleaning of the floor and catch basin. As previously mentioned, our water supply is city water.

- **State the design capacity of any pumps or pipelines for conveying water, wastes, product, etc.;**

The pump used to pump the liquid from the catch basin into the tanker trailer is an industrial pump (220 volts) with a capacity of pumping 80 gallons/minute.

- **Describe the proposed production capacity;**

Our current capacity is 1,000,000 Litres of liquids per month that we can process and dispose with one working shift. We would be able to double if not triple this amount if needed, which is well above the current demand.

- **Identify the proposed mode of production;**

Production would be on a batch basis that could fluctuate during peak season such as summer vacation and holidays. This will be entirely dependent on the customers' needs for product destruction. We would also explore other opportunity from other customers with the same need to be able to have a more constant flow.

- **Indicate the number of employees required during operation;**

We require on average a minimum of 6 to 8 employees.

- Identify the estimated period of operation and number of shifts;

Operations will be done over 1 shift from Monday to Friday for 8 hours per day. Occasionally overtime may occur during peak time.

- State the estimated life span or duration of the main facilities and activities;

The facility is an existing structure, and we plan on keeping it operational for as long as we have recycling contracts.

- Provide a description of the type and quantity of all raw materials, intermediate products, final products and by-products, including waste products such as stack discharges, other airborne fumes, fugitive emissions, liquid effluents, hazardous materials, solid waste, etc.;

No waste results from our process. We transfer all the liquids from the containers to a tanker and send it for further processing and transformation. The plastic, aluminum or glass containers are compacted and baled to be sent off for further transformation as well. Any cardboard will also be recycled.

- Provide a description of all storage locations for raw materials, intermediate products, finished products, and wastes;

The site offers enough storage space for bales, tubs or cases of the product waiting for transportation. The processed product can also sometimes be stored inside a vacant trailer. Glass will be kept in tubs and the liquid will be in the catch basin which is then pumped into a tanker trailer and kept in that reservoir until it is full. Once the tanker is full it is transported to a local third party to be emptied and returned to gmrioux.

- Describe the energy requirements and how the required power will be obtained or brought to the site;

Our crusher runs on 220 volts and our compacter on 550 volts, both are currently operational. No additional energy source is required for this project.

- Describe the sources of all raw materials used during routine operations;

The raw product would be the recyclable containers and their liquid content from various sources.

- Indicate the ultimate fate of all wastes, emissions and effluents including their discharge/disposal locations if applicable; and

No waste is created from our process, the liquid is collected and used for the creation of methane gas that will eventually be turned into electricity. All the other materials are sent off for further processing as well. Any wastewater accumulated from cleaning will be treated with other wastewater from the city in the local wastewater treatment plant(lagoon).

- Indicate the number of trucks/vehicle traffic that would arrive and/or leave the site daily.

We have our regular loads of recycling arriving and leaving the facility which represents about 3 to 6 trucks daily. With the project, the number of trucks in and out of our yard would only increase by 1 or 2.



#### 4.0 IDENTIFICATION OF ENVIRONMENTAL IMPACTS

For each stage of the undertaking (operation and maintenance), identify the anticipated impacts (if any) on the environmental features identified in the previous section. These should include impacts of the undertaking on the environment (e.g., loss of wildlife habitat, emissions to air and water, etc.) and vice-versa. Consideration should also be given to impacts that may result from any accidental events, malfunctions, etc.

Will the proposed undertaking:

- Emit effluent in excess of relevant provincial or federal legislation, policies, guidelines or standards?

No

- Result in the loss of individuals of a threatened or endangered species listed by the federal Species at Risk Act (SARA), Committee on the Status of Endangered Wildlife in Canada (COSEWIC), or the New Brunswick Species at Risk Act, or damage or destruction of an individual residence or critical habitat?

No

- Compromise the conservation of a species of special concern listed by SARA or COSEWIC, listed as 'sensitive' or 'may be at risk' by ERD, or listed as S1, S2 or S3 by the Atlantic Canada Conservation Data Centre (ACDC),

No

- Have the potential to impact migratory birds, thereby requiring appropriate pre-construction surveys to take place (if not, provide a justification of why not, which could include, but not necessarily be limited to, the location of the project and/or the timing of project activities)? Or

No

- Result in the emission of contaminants into the atmosphere that would result in an exceedance of local, regional or national objectives or standards?

No

For our project we recognize there is a small risk of a liquid spill that can occur in the event of equipment malfunction or break. If any, the spill could occur on exterior grounds and this would only happen if the tanker trailer is not in place. The products we manipulate are non-hazardous and made for human consumption, therefore there would be no risk or significant impact to the environment in the event of a product spill.

## 5.0 SUMMARY OF PROPOSED MITIGATION

Describe the measures that will be used to reduce or eliminate the environmental impacts identified in the previous section. A wide variety of measures can be employed depending on the type of undertaking and its physical setting. Mitigation measures should be considered as a hierarchy in which primary attention and priority is given to opportunities to avoid impacts. When these opportunities have been exhausted or it has been demonstrated that they are not feasible, then measures aimed at reducing impacts can be considered. Finally, consideration can be given to measures that compensate for significant unavoidable impacts. Examples of mitigation include but are not limited to the following:

### a) Impact Avoidance

We have a leak prevention plan in place to avoid any liquid waste spills. Our plan consists of a valve located on the pipe that transports the liquid from the catch basin into the tanker trailer. The valve helps control the flow of the liquid. When the tanker trailer is removed to be emptied, the valve is turned off to disrupt the flow of the liquid. The product will remain in the catch basin until it can be safely emptied.

Employees receive safety training upon hiring and regular safety site visits and inspections are performed to ensure the protection of not only the employees but also of the equipment.

### b) Impact Reduction **NA**

### c) Impact Compensation **NA**