Environmental Assessment Newfoundland and Labrador

Name of Undertaking: Proposed Composites Building in Bay Bulls

Corporate Body: GFI Composites Ltd.

Address: 9 Sagona Ave,

Donovans Industrial Park

Mt.Pearl, NL

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Contact person: Patrick Galway

Contact Number: 709-746-2877

Title: Owner

The Undertaking:

GFI Composites Ltd. has completed three and half years of operations. Over this short period, the Company has grown from one employee to eight full time staff and occasional part time help. Their product line has grown from skidoo enclosures to multiple fibre glass products and services and customers from the marine industry, health care, recreation industries, public sector, utilities and offshore oil and gas.

The Company has come to an important crossroads. It requires a larger facility to provide production capacity and more suitable accommodation for quality, health safety and environment. Also the Company has identified a new product line that fits with their capabilities, acrylic tub and showers for the residential housing market. This product is not manufactured in the province or the Atlantic region, but is instead shipped in to our market. Shipping requires high volume, weight and significant cost.

Geographical Location:
The land applied for is located on the dump road in Bay Bulls. It is located between the crown land approved site held by Bay Bulls Marine Terminal for industrial use and the approved waste management site operated by the Town of Bay Bulls. Topographical map of the area with the propose land plotted is include with this application. The site is one Kilometre from route 10 the Southern Shore Highway.

Physical Features:

The land applied for will be used strictly for manufacturing. The physical structures on site will be constructed from pre-engineered steel and will be 6000 sqft .The land consists of vegetation of brush, scrub, and some rock. The land is approximately one kilometre from the nearest body of water, Bay Bulls **LONG** Pond.

Construction:
The construction of the site will take approximately Nine months starting in Sept 2012 and completion scheduled for June 2012. Completion date may be sooner based on severity of the winter and date of final approval. Site will first have to be cleared of any trees and grubbed off. If an oil spill accident did take place with any of the heavy equipment we would start clean up immediately, contact the department of the environment, transport any contaminated soil to a recognised treatment facility, or utilize Emerald Construction of Witless Bay, a company experienced in handling contaminated soil to handle the situation.

GFI Composites Ltd. has engaged a 3rd party consultant (ADI Limited) to do a review on the potential impact that the dump site might have on the operation. ADI will be following David Niefer (Environmental Protection Officer) criteria when it comes to constructing a building in the proximity of a former waste disposal site. Please refer to email between ADI Limited and David Niefer. This review must take place before construct begins.

Operation:
The site and land if approved will be used for GFI Composites Ltd which has made application to the Department of Crown Lands for the property discussed in this proposal. It is a commercial application

with an assigned number of 1034768. We have applied for lease or grant whichever the departments feel is approvable or appropriate.

This will be a permanent location for GFI.

Liquid effluents will be handled by a 600 gal septic tank and a government approved distribution field.

There will be two divided areas for resin and cutting .Both areas will be 1000 sqft in size and will be divided by interior walls so not to contaminate the rest of the shop.

A fibreglass/ styrene emission stack is proposed in the building to deal with any smell that might occur in the manufacturing of fibreglass products. The system will be constructed by Jenkins Power Sheet Metal Inc. This company has installed stacks for Kitchen cabinet shops and automotive shops in the City of St.John's to exhaust their paint and lacquer fumes and have work very well along side of other business and residential houses. Jenkins and Power have quoted me on the following system to properly vent styrene/ fiberglasss emission into the atmosphere. A 3 meter to 4 meter sheet metal stack 18" in diameter will be fabricated on top of the building. The Stack will be anchored by wire cable to keep it in position. A 3 hp 3200 CFM Extraction fan will be located inside the building. Duct work will run from the fan and piped directly in to the stack. 3200 CFM will give a lot of air movement for both exhausting the building and blowing the fumes up the stack and in to the atmosphere. This way no one at ground level can smell any fibreglass/ styrene emissions. This system is commonly used in fibreglass shops in Quebec and works well along side of residential housing.

There will also be an extraction system for dust as well; dust is created from trimming excess fibreglass that is left on the flanges of the product. There will be a cutting table set up with a 6" hose connected to the dust collector that can be moved around to were the employee is cutting. There will be a designated area of 1000 sqft for cutting only. Interior walls dividing the cut area from the rest of the shop will be constructed. A Passenger door to enter cut area will be marked clearly to keep closed at all times. GFI's dust extraction fan will be a 2 stage dust collector. It has a 3 hp motor which can ventilate a 1000 sqft area. The dust collector works with a cyclone system that has two drum below collecting the dust. Large pieces of fibreglass dust fall in to the first drum and the smaller particles go through a filler and into the second drum. Once drums are full of dust they are dumped in the dumpster. It can be operated inside or outside of shop. This system has been proven to work well in other fibreglass shops. Please view equipment pictures in appendix A

Raw materials that will be kept on site will be 3 to 5 pails of Gel-Coat, 1 drum of resin and 1 drum of acetone. These raw materials will be kept outside in a metal container while not in use. Container is of the same construction as the oceanex containers that are used to bring fright in and out of the province. Container will be lined with a chemical resident layer of fibreglass mat and woven. Fiberglass mat and woven will run up the walls 4 to 6 inch even at the point of entre at the door. This will contain any spills that may occur inside. A 45 gal spill kit will be in the shop area; this will contain absorbent pads, rags and other items for cleaning up spills that might occur in the shop.

GFI does not inventory much raw materials do to danger of fire or spills. Our supplier Active Fiberglass who has a warehouse in Donavan's industrial keeps all of our raw materials at their locating. As GFI needs material it is delivered.

Waste that is generated from manufacturing that is of a solid form would be disposed of in a general waste management container that would be dumped once or twice ever month. This waste includes rollers/brushes that have cured hard due to the chemical reaction of the fibreglass resin/Gel-Coat, Cardboard, cured fibreglass trimmings and dust from both the floor and the dust collector. All waste that is placed in dumpster is approved to be hauled to land fill by waste management inc. Resin, gel-coat and acetone comes in metal 45 gal drums, once drums are empty they are cleaned with solvent and returned to our wholesaler Active fibreglass for recycling.

Solvents that are used to clean equipment will be stored in 5 gal pails and deposed of at our City municipal land fill. The City of St.John's has designated certain days that solvents may be drop off.

GFI Composites manufactures 75% of our products on moulds. These moulds are first wax so that the fibreglass will release properly. Then there is a gel-coat applied by a roller. Applying with a roller keeps emissions and over spray low. After gel-coat dries there is a strong layer of fibreglass applied to the entire surface. Resin is sprayed from what is call a fibreglass chop gun. This is a new piece of equipment that sprays resin, hardener and fibreglass chop together. It has an internal mixing system which keeps emissions very low.

The other 25% of GFI's manufacturing is custom fabrication. Fiberglass is applied with a bucket and brush to items such as wood, metal, plastic etc. Also included in this would be small repairs to boat and other recreational equipment.

Occupations:

Number of employees for construction will be 5 to 10. Once construction is completed GFI Composites will employ 5 to 7 full time employees.

Each new employee will be first fit test for the proper 3M respirator, tyvac and gloves before he begins his first shift. He is also briefed on the dangers that can arise in this tip of work environment. GFI follows its own HSE manual for new employee orientation and can be supplied to the Province or the federal Government on their request.

Fiberglass resin contains styrene that can be harmful to our employee health. To prevent this GFI has assigned areas that are used for fibreglass resin and also for trimming. These areas are equipped with extraction fans to exhaust dust or fumes from the area. GFI has also started to use a low VOC resin (Volatile Organic Compounds) from the manufacture progress plastics. There is also a styrene

suppressant added to the resin called styrid. Styrid is purchased in 5 gal pails and is added to the drum of resin. Styrid when used properly in polyester resin will reduce styrene emissions 50% or higher.

GFI has funding for CSA approval and will be audited ever quarter to make sure policys and procedures are being followed.

Project-Related Documents:

N/A

Approval of the undertaking:

Environment Assessment- Federal Government

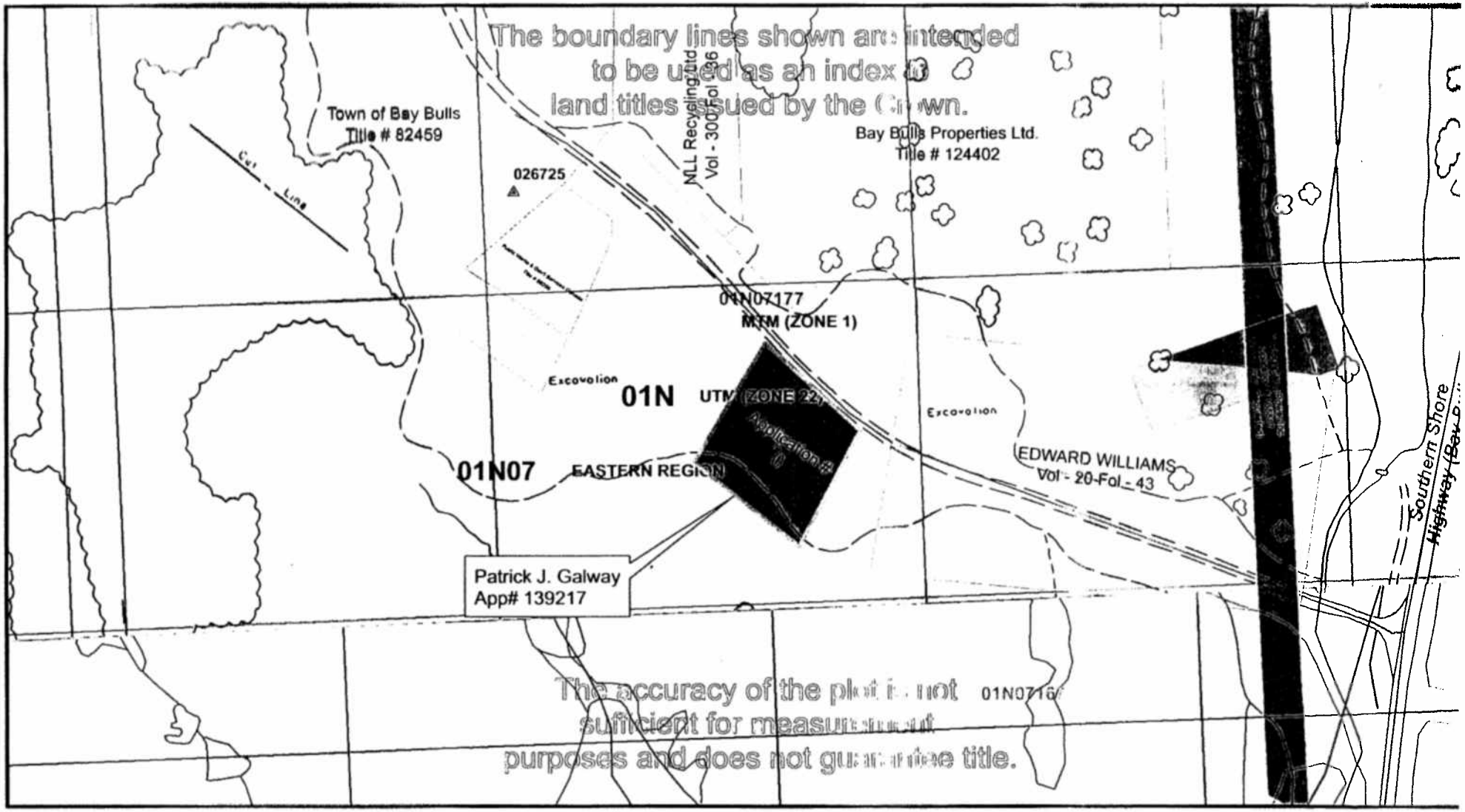
Environment Assessment- Provincial Government

Permits and zoning- Town of Bay Bulls

Schedule:

GFI would like to start construction by Sept 1/12. GFI's funding is close to being in place and we are excited to get started on this new venture.

Government of Newfoundland & Labrador
Department of Environment & Conservation



Crown Lands Division

Scale 1:2,500

Compiled on Sep 19, 2008

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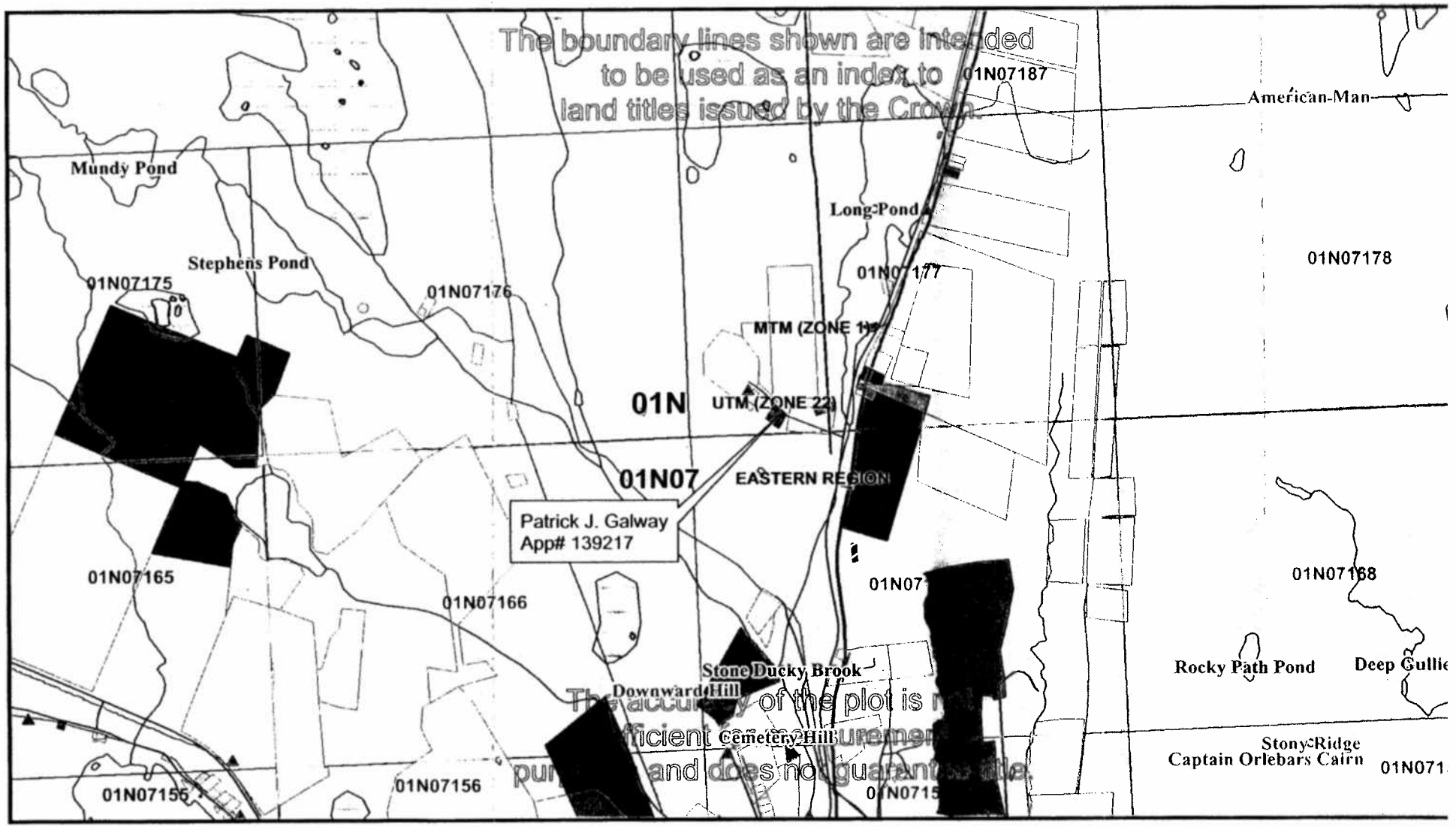

Crown Lands Division

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