



FRP TRAINING CENTER AND SHOP FACILITY  
ENVIRONMENTAL REGISTRATION DOCUMENT

AUGUST 16, 2011

Government of Newfoundland and Labrador  
Environment and Conservation  
Pollution Prevention Division  
4<sup>th</sup> Floor, Confederation Bldg., West  
PO. Box 8700  
St. John's NL, A1B 4J6

August 08, 2011

**Re: REGISTRATION OF AN UNDERTAKING**


Please accept the following package to outline our proposal to provide certified bonder qualification training for Vale frp piping. The Maher Group of Companies has been working on this concept for many years. We feel confident in our ability to provide this training in a manner that is safe for our customer and our community.

It is important to note for the fact that the volume of styrene required onsite for the duration of this project is very insignificant. The volume of resin used at the point of installation at the Vale site in Long Harbour or assembly yards in Argentinia and throughout the Province are exponential in comparison. The volume of resin used in a single frp weld is measured in milliliters. The number of practice lamination occurrences at this facility will be very small. It is noted that Styrene can be smelled at levels of 1 to 2 ppm, which is harmless, non-irritating but annoying to some. Construction site workers will need some education and understanding of the annoyance factor.

This proposal will outline the use of resin for FRP training and demonstrate that the level of odor and potential nuisance risk is low. Due to location of this undertaking and the low volumes of resin consumed we trust the Minster will review our registration document favourably resulting in a release from the assessment process.

I look forward to you reply,

Sincerely,

A handwritten signature in blue ink that reads 'Adrian Maher'. The signature is written over a horizontal line.

Mr. Adrian Maher  
President

## **REGISTRATION OF THE UNDERTAKING**

**NAME OF UNDERTAKING:** Certified FRP (Fiberglass Reinforced Polymer)  
Bonder Qualification Training Facility

### **PROPONENT:**

- (i) Name: Maher Group of Companies Inc

The Maher Group of Companies has a long history of business ventures in Newfoundland and Labrador. From diverse business holdings the Group's interests are concentrated in three principle areas; Business Development, Industrial Supply and Service and Property Management. We are an entrepreneurial organization located in St. John's, Newfoundland and Labrador. Our dedicated team of business professionals provides strength and innovative solutions to our clients.

The combination of this uniquely qualified group of companies offers a capacity and methodology, to provide both short-term and long-term benefits. Our core strategy is to establish and foster unique partnerships that bring together large multi-national corporations, national companies and local enterprises. We are dedicated to identifying our client's needs then harnessing the proper and experienced resources to meet the local demands of major projects.

### **Health, Safety, & Environment**

Maher Group of Companies Inc. places utmost priority on the HSE aspects of its operations. The group is COR certified with the Newfoundland and Labrador Construction Association. Our safety program is recognized within the PRIME program with Workplace Health, Safety and Compensation Commission (WHSCC) of Newfoundland and Labrador.

The personal safety and health of each employee of the company is of primary importance. The prevention of occupationally induced injuries and illnesses is of such consequences that it will be given priority over operating productivity where necessary. To the greatest degree possible, management will provide all mechanical and physical facilities required for personal safety and health in keeping with the highest standards.

On a Project Site, our company will ensure that the contractors abide by appropriate rules and regulations. The Maher Group Health and Safety Plan provide the fundamental components for HSE on any project we

work. There is no task too important to ignore the importance of the health, safety and environment associated with our projects.

Quality Management System

Maher is committed to achieving the highest quality standards in an effort to meet client expectations. Our quality manual is benchmarked to ISO 9001:2008 and as our company continues to grow so will our quality management systems.

(ii) Address: 702 Water Street  
St. John's, NL A1E 1C1

(iii) Chief Executive Officer  
Name: Mr. Adrian Maher  
Official Title: President  
Address: 702 Water Street, St. John's, NL  
Telephone No.: 709-763-4279

(iv) Principal Contact person for purposes of environmental assessment:  
Name: Mr. Andrew Colford  
Official Title: Vice President  
Address: 702 Water Street, St. John's, NL  
Telephone No.: 709-689-1584

**THE UNDERTAKING:**

(i) Nature of the Undertaking: This is an undertaking to open and operate a certified frp bonder qualification-training program for ASME 31.3 Vale pipe.

(ii) Purpose of the Undertaking: Vale's commitment to establish a commercial hydrometallurgy facility in Long Harbour-Mount Arlington Heights, Newfoundland and Labrador presents many opportunities.

Vale's state of the art facility will have technologies and be one of its kind for its electroplated process known as "electrowinning". This new process will incorporate a tremendous amount of exotic materials as well as known materials such as composites and particular fiberglass reinforced polymer.

There is a legislative requirement for each pipefitter to train and certified to an ASME B-31.3 Vale pipe standard. At present there is no facility registered in the Province to provide this training. There is estimated need for 75-125 pipefitters requiring this training.

## DESCRIPTION OF THE UNDERTAKING:

- (i) **Geographical Location:** Our proposed site for this undertaking is at a 3,200 sq foot facility located at the intersection of Route 101 and 202 in Long Harbour. This property is currently owed by the Proponent and is applying for an occupancy permit changed from retail to light industrial. See attached map and sketch of the building.
- (ii) **Physical Features:** This building is a new build that is currently not used. It is an open concept building with approved water and septic system. The property is completely isolated from the Town of Long Harbour and any adjoining commercial trade. There is a 5+ kilometer buffer in any direction for any potential receptors (commercial and residential developments).
- (iii) **Construction:** This building is constructed with occupancy approvals in place for retail space.
- (iv) **Operation:** This training program will last for the duration of the construction phase of the Vale plant in Long Harbour. The current scheduled completion date is February 2013. Information can be provided that shows the amount of resins required and the curing times. Trainees will be required to complete and test a joint during the two-week program. Due to the volume of resin required and its shelf life we will only be storing one drum of resin onsite at any time.

The training will involve following a strict methodology as outlined in a Joint Lamination Sequence sheet for each pipe size from 0.5" – 32". Testing will be done on an 8" pipe joint. The total use of resin during the successful completion of an 8" join is less than 5 lbs and the total time to complete a successful joint is 2 hours of laminating depending on temperature. The training program will be limited to a maximum of 16 trainees per 2-week session. It is estimated that there are at minimum 45-50 pipefitters that will require this training. With staff turnover and project scheduling demands it is anticipated that 100-125 may require training.

The following schedule highlights the training program.

### **Week 1**

#### **Day 1:**

- Introduction of course
- Safety
- Basic materials

## Manufacturing and construction methods

### Day 2:

Introduction to Lamination  
Practical Training – Lamination (1-2 hour resin usage)

### Day 3:

Inspection methods  
Introduction to Secondary Bonding

### Day 4:

Practical Training - Secondary Bonds (1-2 hour resin usage)  
Inspection

### Day 5:

Introduction to FRP piping  
Review of FRP standards, Code requirements & Qualification  
Quiz

## Week 2

### Day 6:

Review of FRP pipe fitting fundamentals  
Introduction of Butt Joint Spec

### Day 7:

Practical Training - Butt Joint (1-2 hours resin usage)  
Demo Peel-a-bond  
Introduction of tapered adhesive joint

### Day 8:

Practical Training Tapered Joints (1-2 hour resin usage)  
Introduction of Stub-in joint  
Practical Training multistage stub-in joint (1-2 hour resin usage)

### Day 9:

Discussion of inspection & field tests  
FRP flange joining

### Day 10:

Testing safety  
Questions, Discussion & Review  
Pressure test for Certification of Bonder

Health, Safety and Environment: The bonding qualification training facility will comply with all Health, Safety and Environmental regulations applicable in NL. The Maher Group safety manual clearly outlines our policies and procedures of dealing with hazardous materials.

Our regular effluent waste (sewage) will be handle through our approved sewage disposal system for this building. In addition we will be handling

very small volumes of styrene, which is the odor-causing compound in fiberglass. In the unlikely event of a spill we have developed procedures to handle any clean up of styrene spills. There are special compounds such as clay and dry sand, which will absorb spilled solvents. Cleanup of large spills will involve specific response procedures. All consumables (hazard and non hazard) will be disposed of according to our HSE policies and procedures. There are no unusual procedures identified in our manual and we use MSDS sheets or best practices to handle any waste streams.

The primary issues relating to styrene are fire safety and emissions control. Our approach to this project is to operate under strict adherence to the existing regulations and take a proactive approach to HSE so our actions will be indicative of our commitment to employee safety and protection of the environment.

Fire Safety: For this undertaking the amounts of frp materials onsite will not be a fire hazard. Our primary safety approach is to equip the classroom and shop for fire prevention and ready means of personnel escape. We intend to exceed the provincial fire regulations for fire extinguishing devices on site. The simple design of the building will allow for quick and safe exit in the unlikely event of a fire.

Emissions: Styrene is a regulated substance with specific limits on worker air quality. From a workplace quality perspective the limits in NL are a STEL (short term exposure limits) of 20 ppm and a TLV (threshold limit values) of 40 ppm. From an environmental perspective there are no provincial regulations enacted for minimal levels. If further information is requested or for the purposes of developing a baseline we would propose to test and analyze results based on Ontario standards. Due to the location of our shop we do not see any requirement to monitor at POI's (point of impingement) that are currently kilometers away from the facility.

Ventilation: External venting to the atmosphere will occur 4 times per hour when laminating is occurring. The process will involve opening vents until the air has circulated.

Air Quality: In the absence of a guideline for odor emissions in Newfoundland and Labrador, the Ontario Point of Impingement (POI) Limits could be used for comparison with ambient air concentrations. The Point of Impingement is defined by the Ontario Ministry of Environment as: "Any point on the ground or on a receptor, such as nearby buildings, located outside the company's property boundaries at which the highest concentration of a contaminant caused by the aggregate emission of that contaminant from a facility is expected to occur".

Due to the location of our facility we do not anticipate any issues with any POI locations. We are proposing this undertaking on a 3-acre site outside the Town of Long Harbour – Mount Arlington Heights. The closest POI would be several kilometers away.

There are no foreseen resource conflicts.

(v) Occupations: We will have 2 trainers and an office administrator during the undertaking. We will have no input on the selection of trainees. We will be guided by our HR policies and procedures for hiring and employment equity.

(vi) Project-Related Documents: Attached are background information relating to the undertaking.

#### **APPROVAL OF THE UNDERTAKING:**

We require an occupancy permit from the Town of Placentia and Government Services.

#### **SCHEDULE:**

It is anticipated that modules will arrive in Long Harbour mid October 2011 and the first pipe fitters will have to be qualified to install that pipe,

#### **FUNDING:**

All funds for this project will be from private sources and the estimated cost for set up would be less than \$150,000K for tools and equipment.

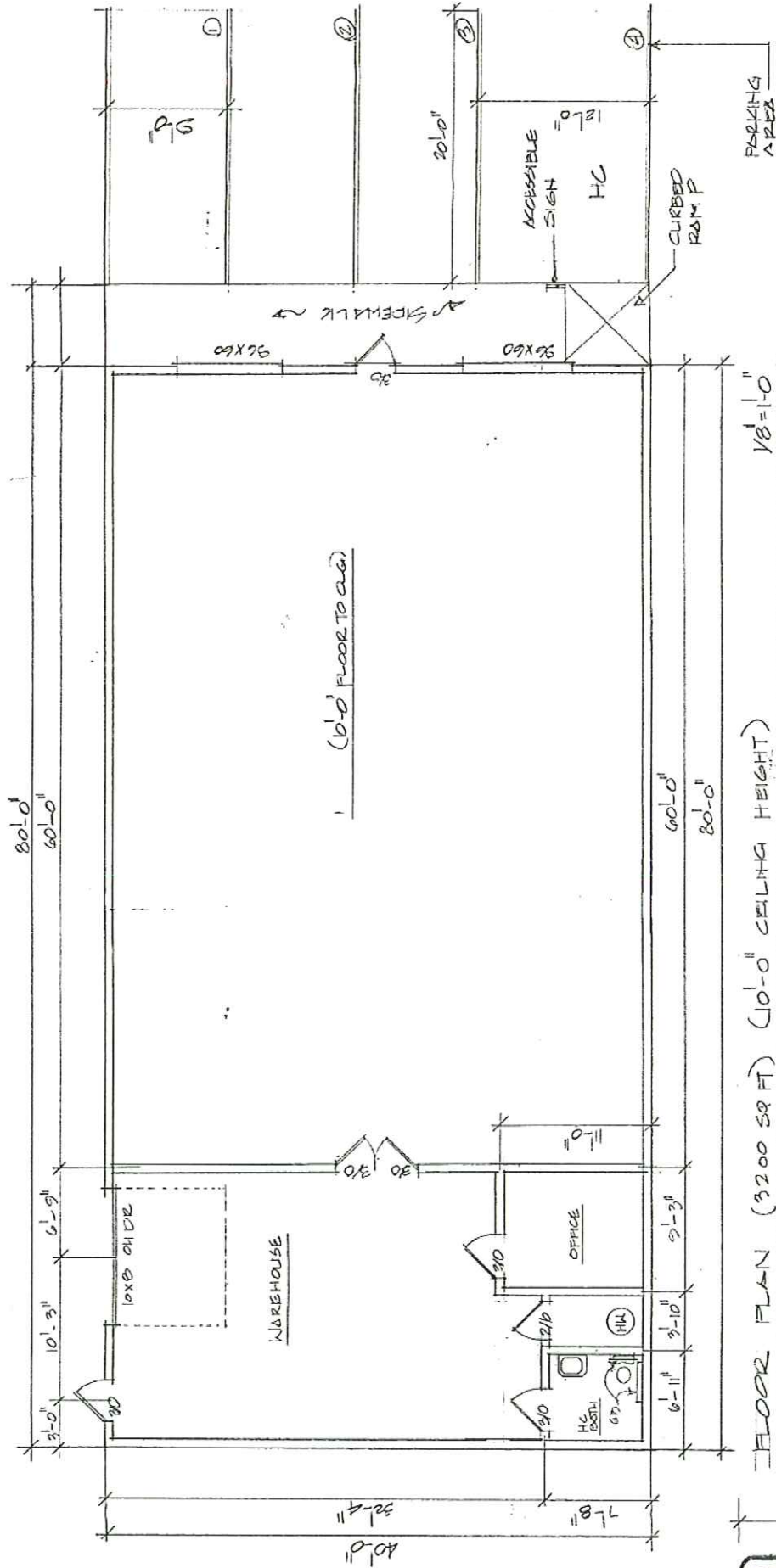
Our proposal is to offer certified frp bonder qualification training in our local training facility for the construction phase of this plant. The site is located away from possible POI or receptors. Maher Group will access any expansion plans in the future and will make application if it intends to expand on the current scope of offering a training course at this facility.

  
Mr. Adrian Maher

  
Date

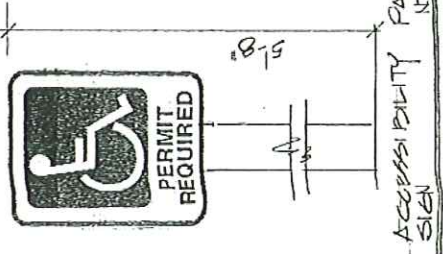
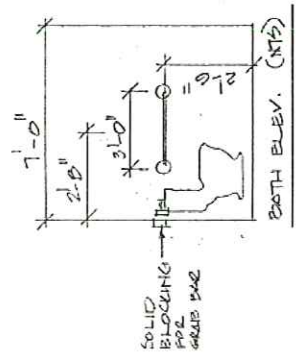
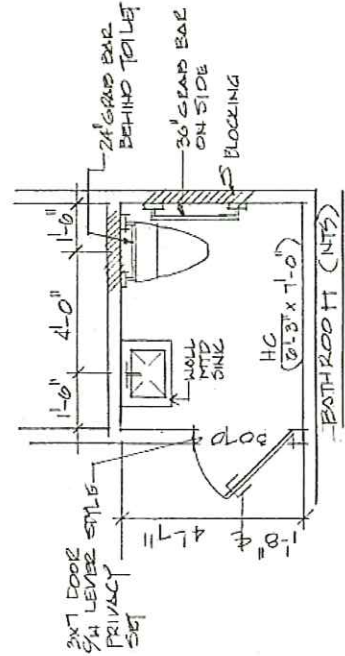


ATTACHED – BUILDING DRAWING AND LOCATION



FLOOR PLAN (3200 SQ FT) (10'-0" CEILING HEIGHT) 1/8" = 1'-0"

BLDG 8040-3200  
 DATE JUNE 2011  
 SHNO A3

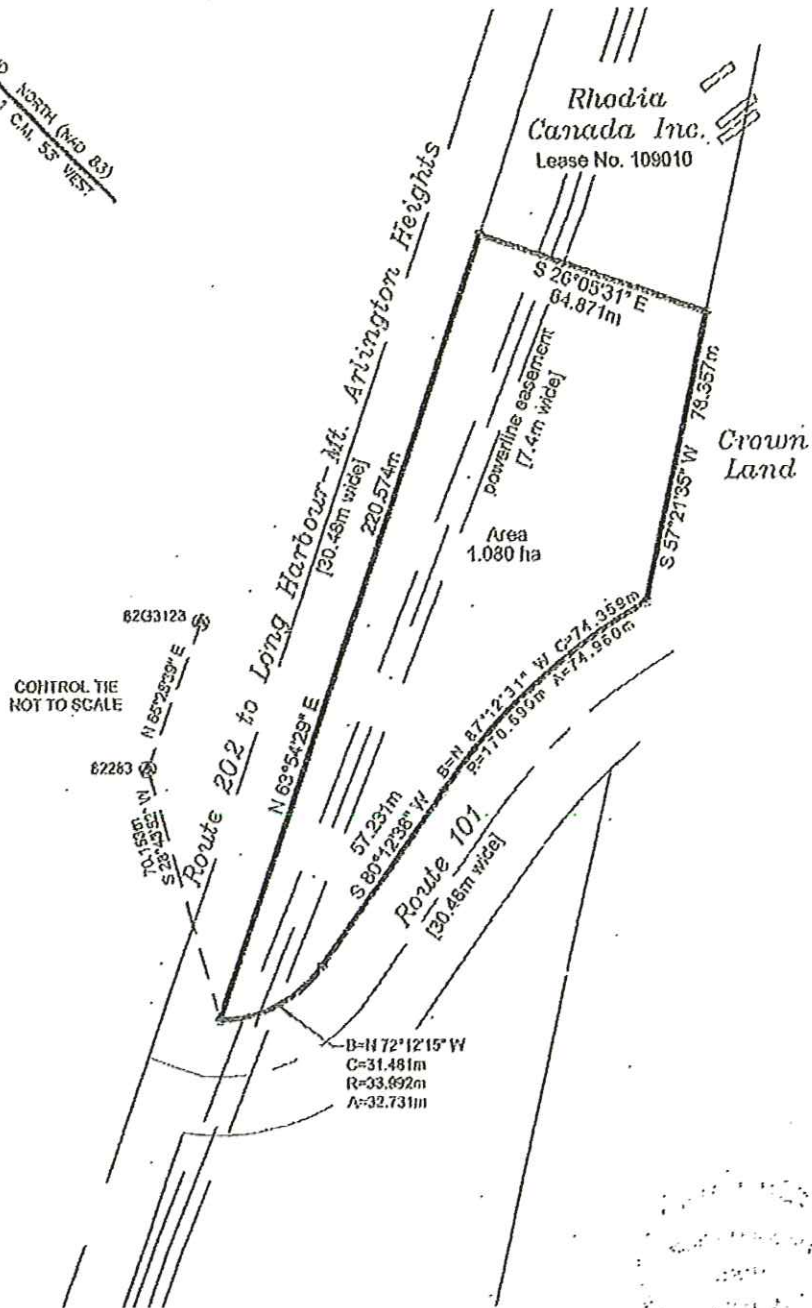
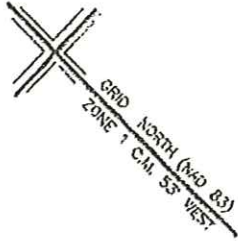


ACCESSIBILITY PARKING SIGN



PARCEL 2

# Schedule "B3"



2-66  
2010

Don Wiles

LEGEND:-  
 CONTROL MONUMENT ———— ⊙  
 PLACED CAPPED IRON BAR ———— ○  
 FOUND IRON BAR ———— □  
 PROPERTY DEALT WITH ———— [dashed]  
 POWER-TELEPHONE LINES ———— [dashed]  
 EASEMENTS ———— [dashed]

NOTES:  
 ALL POINTS WERE OCCUPIED TWICE.  
 ANTENNA DUMPS WERE PERFORMED  
 BETWEEN OBSERVATIONS.  
 ALL DISTANCES ARE HORIZONTAL  
 GROUND DISTANCES & METRIC.  
 APPLICATION NO. 109101

CROWN LAND MONUMENT  
 NO. 82283  
 N 5 256 498.861  
 E 248 028.377  
 ELEVATION = 39.560  
 SCALE FACTOR = 0.999936

CROWN LAND MONUMENT  
 NO. 82G3123  
 N 5 256 000.490  
 E 247 708.416  
 ELEVATION = 59.195  
 SCALE FACTOR = 0.999931

JUNE, 2009  
 SCALE: 1 : 1500



AVAILABLE – INSTALLATION INFORMATION FOR RPS PIPING

AVAILABLE – INSTALLATION INFORMATION FOR RPS PIPING