

FRP TRAINING CENTER AND SHOP FACILITY
ENVIRONMENTAL REGISTRATION DOCUMENT

SEPTEMBER 26, 2011

Government of Newfoundland and Labrador
Environment and Conservation
Pollution Prevention Division
4th 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 and establish a small frp pipe services company. 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 throughout the Province are exponential in comparison. The volume of resin used in a single frp weld is measured in milliliters. The number of lamination occurrences at this facility will be very small compared to large scale production facilities. 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 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 Minister will review our registration document favourably resulting in a release from the assessment process.

I look forward to your reply,

Sincerely,

A handwritten signature in cursive script, appearing to read "Adrian Maher", 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 and Service Center 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 and operate an frp shop.
- (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 Building #772M a 10,000 sq foot facility located in the Argentia Industrial Park. This property is currently owed by the Argentia Management Authority and will be lease to Omni Industrial Services. See attached map and sketch of the building.
- (ii) **Physical Features:** This single story warehouse building was constructed in 1956 and has a floor are of 10,500 sq ft (975m²) and a floor to roof deck height of 15 ft (4.5m). It is an open concept building built to the highest specifications and is a combination of concrete and steel structure. The property is completely isolated from the Town of Placentia and is within the Argentia Industrial Park.
- (iii) **Construction:** This building will require some modest leasehold improvement to improve its energy efficiency and allow for adequate ventilation.
- (iv) **Operation:** The 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.

FRP services will begin during construction and continue into the operations of the plant. 80% of all frp services will be completed onsite in Long Harbour however it is realistic to consider small amounts of manufacturing and assembly in this facility to support our onsite services. These services will include inspection, testing, pipe spooling and manufacturing fittings.

The training will involve following a strict methodology as outlined in a Joint Lamination Sequence sheet for each pipe size from 0.5" – 36". Testing will be done on an 10" pipe joint. The total use of resin during the successful completion of an 10" 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 8 trainees per 2-four day 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.

Day 1:

- Introduction (Classroom)
 - a. Overview (classroom)
 - i. Introduction
 - ii. Participants
 - iii. Attendance
 - iv. Goals and Requirements for Certification
 - b. Safety
 - i. Yours
 - ii. Your team
 - iii. Equipment
 - c. Description of FRP Materials
 - i. Glass Reinforcement
 - ii. Resins
 - iii. Additives
 - iv. Resin working life
 - d. FRP Materials Hazards
 - i. Safety Equipment
 - ii. Ventilation
 - iii. Flammable Materials
 - iv. FRP Materials
 - e. Material Handling, Storage and Shelf Life
 - i. Receiving
 - ii. Unloading and Handling
 - iii. Transporting
 - iv. Unpacking
 - v. Storing
 - vi. Shelf Life
 - f. Flange Joining
 - g. Open Discussion

Day 2

- Butt and Wrap and Tapered Adhesive Joining
 - a. Overview – Classroom
 - i. Kit material
 - ii. Equipment
 - iii. Safety Instructions
 - iv. Joint Preparation
 - v. Joint Lamination
 - vi. Tip and Warnings

- vii. Inspection Check list
- viii. Allowable Defects (WI-IT-008)

Butt and Warp Joining

- a. Shop – Hands on
 - i. Review of Butt and Wrap joining instructions
 - ii. Instructor Demonstration
 - iii. Participants Perform Practice Butt and Wrap Joints

Tapered Adhesive Joint

- a. Shop – Hands on
 - i. Review of Tapered Adhesive Joint Instructions
 - ii. Instructor Demonstration
 - iii. Participants Perform Practice Adhesive Joints

Day 3

Butt and Warp and Tapered Adhesive Joining

- a. Shop – Hands on
 - i. Participants Perform Butt and Wrap Joints on Certification Spool

Health, Safety and Environment: The 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 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:

Funds for this project will be primarily from private sources and the estimated cost for set up would be less than \$150,000K for tools and equipment. Public funds have been applied for to assist with some of the set up.

Our proposal is to offer certified frp bonder qualification training in our local training facility for the construction phase of this plant. We are also trying to establish and industrial frp competency in the region to support the ongoing maintenance of the 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.

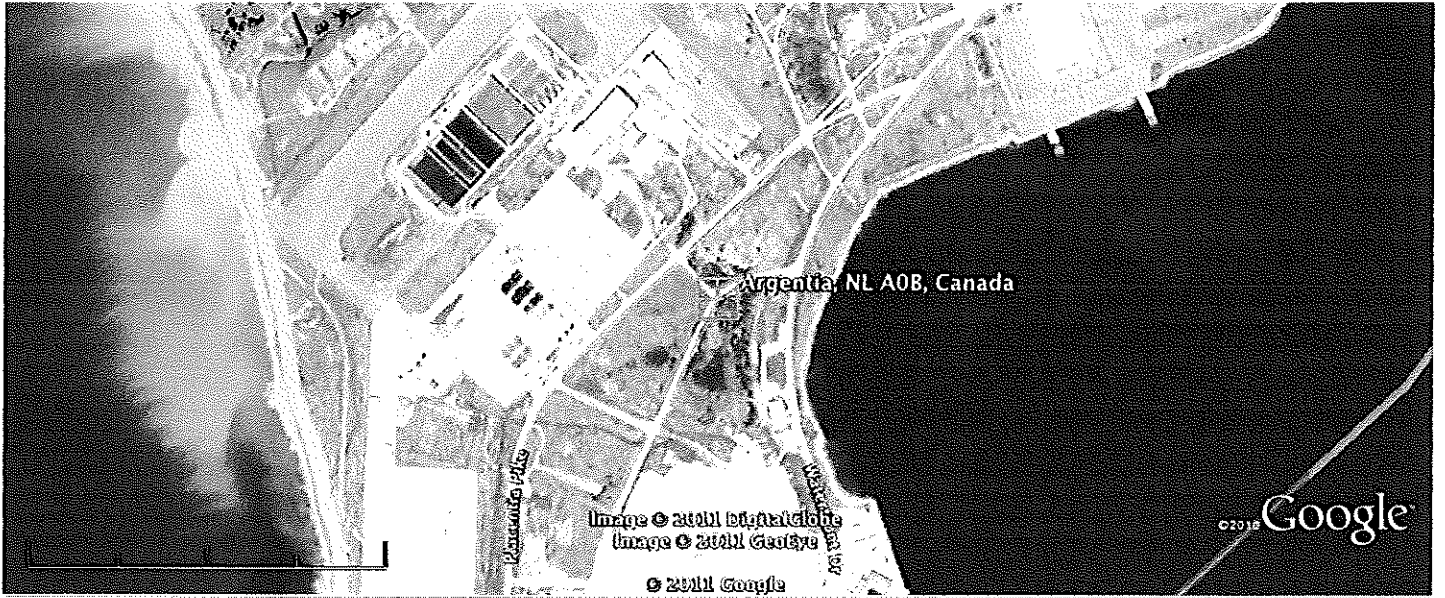


Mr. Adrian Maher



Date

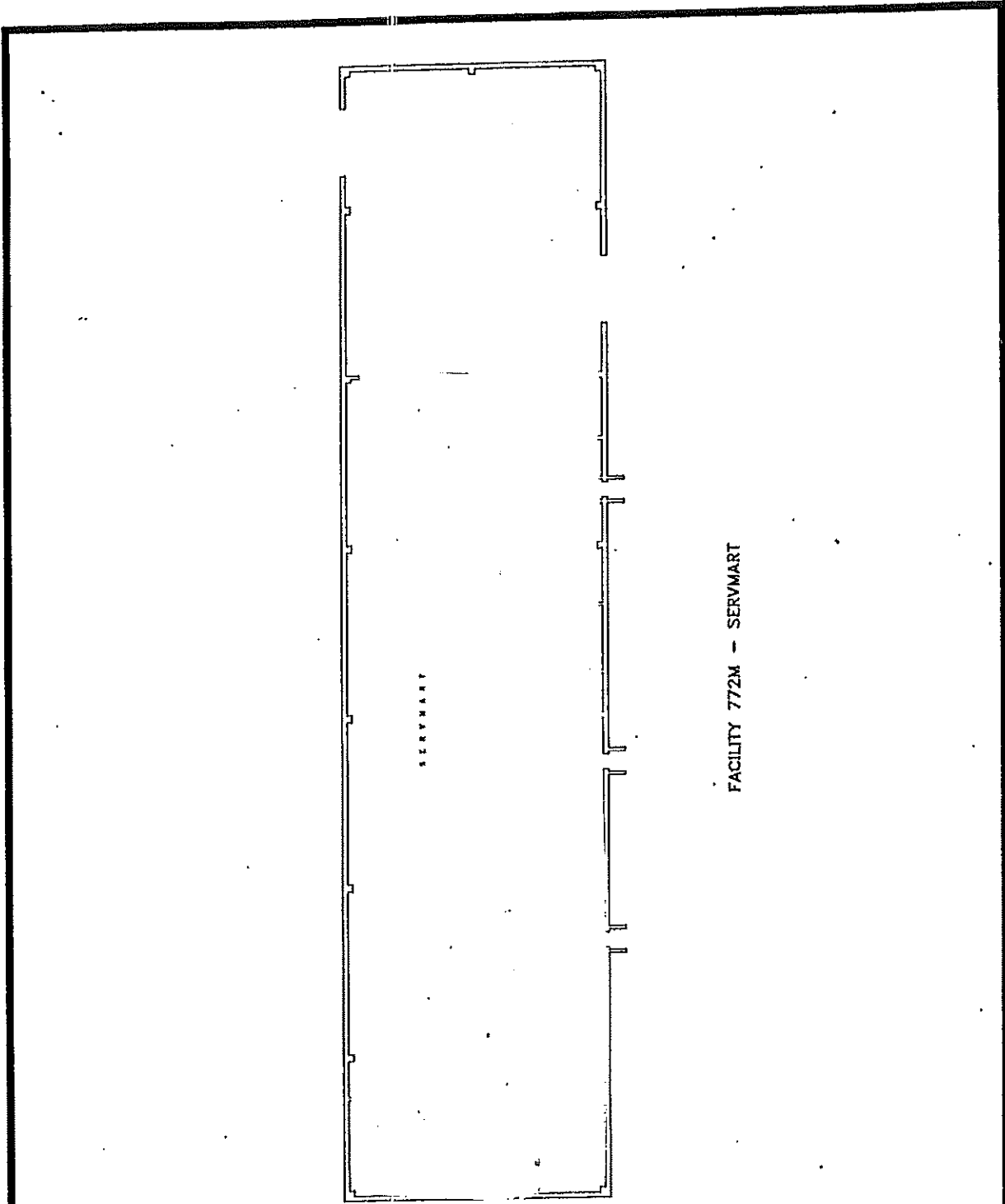
ATTACHED – BUILDING DRAWING AND LOCATION



argentia nl

Argentia, NL A0B, Canada





	Drawing title: Titre du dessin:	Building #772M Floor Plan	designed by: conçu par:	N/A
	scale: échelle:	as shown	drawn by: dessiné par:	T.C. & P.K.
Argentia Naval Base Condition Study	date:		revisions:	approved by: approuvé par:
				project no: no. du projet:
				dep. no. dessin no. SK-772



AVAILABLE – INSTALLATION INFORMATION FOR RPS PIPING