NPL

Newlab Plastics Ltd
P.O. Box 21039, Sugarloaf Road
St. John's, NL Canada A1B5B2

Registration Form Pursuant to the Environmental Assessment Regulations, 2003, for the proposed Wood Composite Manufacturing facility in St. John's, NL

Presented by
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NAME OF UNDERTAKING:

Newlab Plastics Wood Composite Manufacturing Facility

PROPONENT:

i) Name of Corporate Body

Newlab Plastics Ltd

ii) Address:

P.O. Box 21039
Sugarloaf Road
St. John's, NL, A1A 5B2

iii) Chief Executive Officer

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Chief Executive Officer
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Tel No: 709-579-4688

iv) Principal contact for purposes of environmental assessment:

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THE UNDERTAKING:

i) Nature of the Undertaking:

Newlab Plastics Ltd (NPL) is a manufacturer of wood/plastic composite (WPC) lumber for the residential and commercial markets. The company will be utilizing existing stocks of sawdust and recyclable plastic to use as raw materials in the manufacturing process. The company will focus on selling product to the local and global markets for decking and fencing. The proponent intends to establish a wood composite manufacturing facility in the former Matchless Building on the corner of Sugar Loaf Road and Robin Hood Bay Road in the city of St. John's. The undertaking will involve the processing of sawdust and plastic to produce a wood composite decking and fencing material.

ii) Purpose/Rationale/Need for Undertaking

The purpose of the undertaking is to derive revenue from the manufacture of Wood/Plastic composite lumber.

According to the Environment and Plastics Industry Council, (EPIC) wood composite and plastic deck boards and railing, captured more than 11% of the residential deck building market across North America in 2001. This market is expected to grow substantially by 2005. NPL is looking to capitalize on this potential growth and enter the market at a time when the demand is expected to be strong. The wood/plastic composite (WPC) lumber makes up about 80% of the plastic lumber produced with about 20% utilizing recycled (RPL) or virgin plastic.

There is also a significant environmental rationale to the business. On February 12, 2002, the Environmental Protection Agency (EPA) in the United States announced a voluntary decision by industry to move consumer use of treated lumber products away from a variety of pressure-treated wood that contains arsenic by December 31, 2003, in favour of new alternative wood preservatives. This transition affects virtually all residential uses of wood treated with chromated copper arsenate, also known as CCA, including wood used in play-structures, decks, picnic tables, landscaping timbers, residential fencing, patios and walkways/boardwalks. As of January 1, 2004, the EPA will not allow CCA products to be used to treat wood intended for any of these

residential uses. This decision will facilitate the voluntary transition to new alternative wood preservatives that do not contain arsenic in both the manufacturing and retail sectors. This decision has given the wood composite and plastic lumber industry a major inroad to the markets as its products have none of the negatives associated with pressure treated wood.

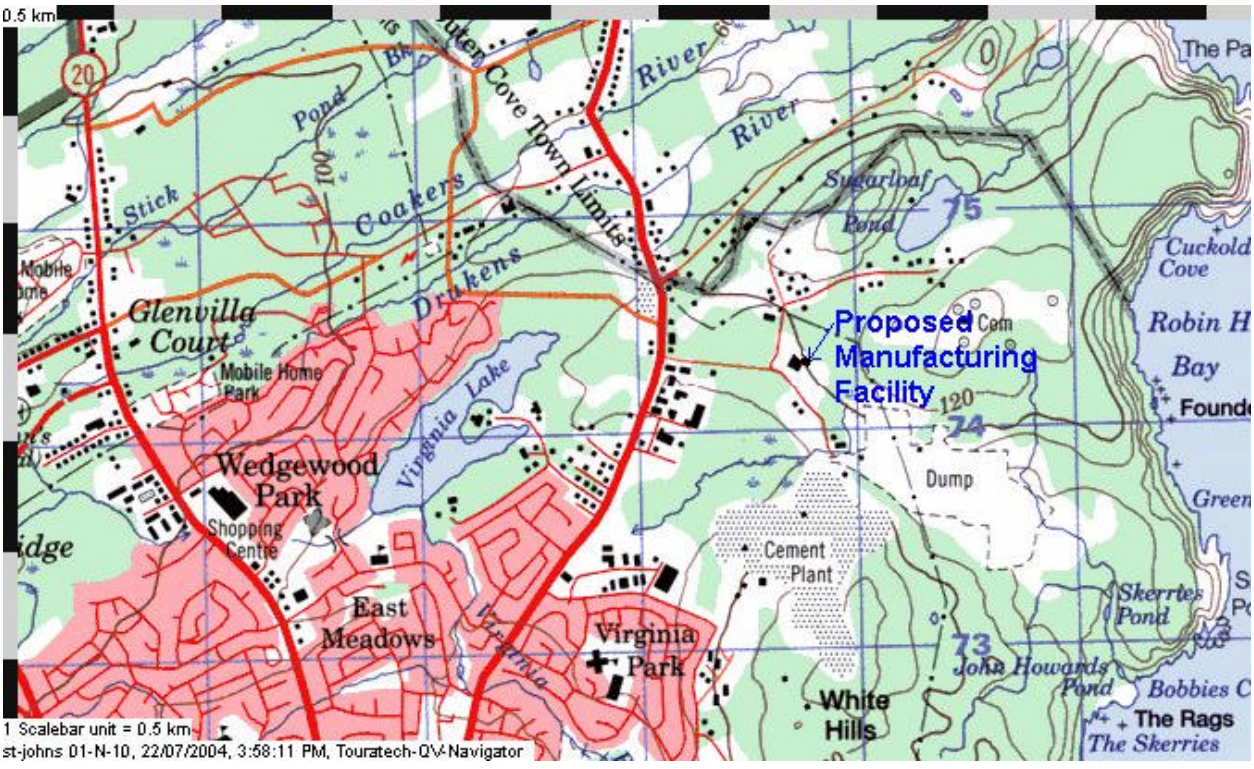
As a result of the elimination of CCA-treated wood for residential uses, a need for alternate wood treatments has arisen. One alterative is the use of woods that do not require treatment, such as cedar and redwood. Unfortunately these types of lumber are prohibitively expensive and are non-renewable, and therefore the lumber industry must seek out other options. Two possible alternatives are the use of woods treated with Ammoniacal Copper Quaternary (ACQ) and Wood /Plastic composite Lumber.

Wood/plastic composite lumber has gained acceptance in a variety of applications, including playground equipment, pallets, park benches, picnic tables, decks, and docks. It is extremely durable and requires little maintenance, reducing the longer terms costs of maintenance and repair that are common with wood decks. WPC lumber can be sawed and drilled, and resists rot, warping, splitting, and insects.

DESCRIPTION OF THE UNDERTAKING

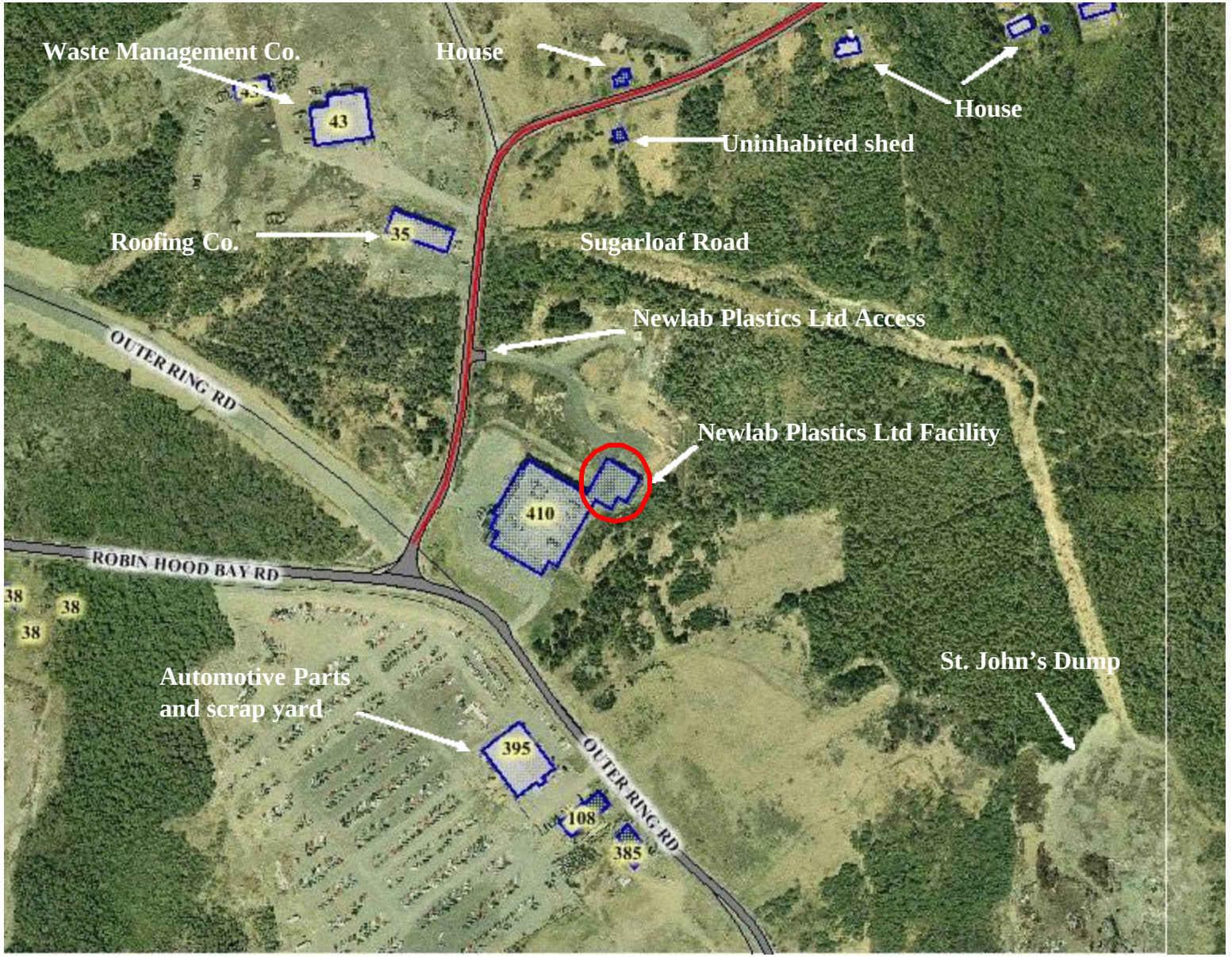
i) Geographical Location;

The site chosen is located within the boundaries of the Matchless Building situated on the corner of Robin Hood Bay Road and Sugarloaf Road. Specifically, the undertaking will be located in a 6700 Sq ft section of the building that is to the North Rear of the building, and is accessed via a separate entrance off Sugarloaf Road. The building is a 56,000 sq ft warehousing facility, located .5 km from the St. John's Municipal Dump at Robin Hood Bay. The location was chosen for it accessibility and proximity to the Trans Canada Highway. Sitting directly on the recently completed Outer Ring Road, the location ensures that all incoming and outgoing traffic does not pass through residential areas of St. John's or surrounding municipalities.



Picture 1. National Topographic Survey (1:50,000)

The following picture is an aerial photo containing more detailed information.



Picture 2. Map of area of Proposed Undertaking (1:4000)

As per Picture 2, the Proponent will be operating in the Matchless building (labelled 410) and will be leasing space in the circled area of the building. This area is 6,700 sq ft. Access to the building is via The Outer Ring Road turning left onto Sugarloaf Road. From the picture you can see the St. John's dump, which is approximately .5 km from the site.

Some of the businesses around the area include:

- 395 – Automotive parts business and storage yard,
- 108 – Tire rendering facility
- 35 – Roofing company
- 43 – Waste management Company

The nearest residential home is almost .5 km away and is shielded by dense forest and lies above the existing facility such that the facility cannot be viewed from the area. There is a 20 foot high retaining wall built into the hill behind the proponent's facility that further shields the area from the road.

The proponent's facility is well shielded from the road by dense forest and bush. No trucks will have to pass residential areas, as access to the facility is less than 100m off the Outer Ring Road.

ii) Physical Features

- There are no physical changes occurring to the building.
- The area affected by the undertaking is the area outlined in the maps above; there are no external areas outside the boundary that are affected.
- There are no biological environments that will be affected by the business. With the exception of exterior storage of final product, the operation is contained within the building.

iii) Construction

Equipment used in the manufacturing of wood-plastic composite lumber will be installed in the building. The proponent will utilize approximately 7,700 square feet of the facility, including a 6,700 square foot production area. Two silos, three cubic metres in size, will be installed inside the facility to house the raw materials. A wood dryer, scales, and associated blowers, fans and

vents will be installed to prepare the raw materials for processing. For the main production line, a twin-screw standard extruder, a chiller and vacuum spay tanks with rollers and conveyor belts, a saw and dump tables will be installed. Support and ancillary structures such as lighting, catwalks, electrical conduit and wiring, piping and blowpipe will also be installed in the facility. A 200-gallon diesel storage tank will be installed at the facility to provide fuel for the wood dryer. All other manufacturing equipment will run on electricity. Standard office equipment such as computers, furniture and telephones will also be installed. There are no exterior changes to the building.

iv) Operation

? Description of the Operation

The wood plastic composite lumber is made utilizing an extrusion process. The proponent will be utilizing a state of the art twin-screw extruder to manufacture all its products. The basic steps in the manufacturing process are as follows:

1. Recycled plastic pellets are fed into a hopper where they are readied for processing.
2. Sawdust is fed into a drying machine for further processing, and then fed into a hopper;
3. The plastic and sawdust are mixed together at a temperature of approximately 250°F in a compounder/mixer.
4. Additives may be added based on a predetermined formula. These come in solid form and are often mixed with the plastic itself. They are not hazardous.
5. The mixture is then fed into the extruder where it is processed and fed through a die where is comes out in its final shape.
6. The product, forced out of the extruder by the twin screws, comes out of the die, and is fed through the chilling line and placed in inventory. The chilling line utilizes 1 gallon of water an hour and recycles the water.

The manufacturing process is a closed loop system that is computer controlled and based on the predetermined formula for the desired product. The proponent will focus primarily on manufacturing wood-plastic composite lumber for decking and fencing. There are no dangerous chemicals used in the process. The plastic will be recycled high-density polyethylene (HDPE)

from recycled grocery bags, milk jugs and other household plastic waste. The HDPE is not a volatile chemical and comes in pellet form. The sawdust is waste from sawmills and wood working facilities. All raw materials are stored internally and come in palletized 1000 lb plastic bags and boxes. The additives will be in small amounts and will come as pellets to feed into the process. As mentioned some of the HDPE pellets will come mixed with the additives already added.

? Estimated Period of Operation

This is a permanent facility.

? Potential Sources of pollutants during the operation period.

The company does not anticipate any sources of pollutants during the operation of the Undertaking. Both types of raw material are not hazardous and are easy to clean up if spilled as they come in solid form. The manufacturing process simply combines the two raw materials into a wood composite product. The extrusion machine operates at a temperature of 250°F and there are no air emissions from the extruder. Also, because the plastic encapsulates the wood fibre during the process, there are no dust emissions.

The company will be utilizing a diesel fired wood dryer with minimal emissions much less than a household furnace. The diesel will be stored externally in an approved 200 gallon fuel storage tank and will exceed all safety guidelines pertaining to handling of fuels.

There are no solid waste materials generated from the process, as any undesired or ruined product is itself recyclable. In the event that it has to be disposed of, the product can be deposited at the local dump since it is made from household waste that is currently being disposed of at the dump.

(v) Occupations

Our plans are to hire local people, train them in the safe handling of all the products and equipment on-site. This includes the operators, technical personnel and material handlers. We anticipate the hiring of at least 20 people on a permanent basis. Employment in the facility will

include a Plant manager, shift supervisors, line operators and material handlers. Maintenance (both electrical and mechanical) will be contracted to an outside firm on an as needed basis. With the exception of the Plant Manager, who will be experienced in the industry, these positions do not require any highly technical expertise or education. The annual payroll is expected to be over $600,000 per year. It is expected this plant will have a multiplying effect on job creation and the general economy of the area. We are not certain what multiplier is to be expected, but believe reasonably it could be from 3 to 7 times.

The NOC (2001) codes for the production jobs would be:

- 9214 – Supervisor, Plastic and Rubber Manufacturing
- 9422 – Extruder operator
- 9614 – Labourer wood processing

APPROVAL OF THE UNDERTAKING

The proponent will work with both the provincial and local governmental authorities so that all the relevant construction and environmental permits will be properly obtained. We anticipate the local Municipality, Fire Department, and Regional inspection and environmental agencies will help expedite the process. The proponent will hire local engineers and contractors to ensure that all work will be done in accordance with local laws, codes and regulations. The following is a list of permits, approvals, and authorizations that will be necessary for the proposed undertaking:

PERMIT/APPROVAL	CONTACT
Approval of the Undertaking	Minister of the Environment and Conservation
Municipal building and inspection permits	City of St. John's
Transportation of goods	Transport Canada, Environment Canada
Workers Compensation	WHSCC

SCHEDULE

Assuming all approvals are in place the earliest date the undertaking could commence would be December 1,2004. This is due to the lead-time required to order, ship and install the equipment and train the employees.

FUNDING:

Funding for this undertaking has been requested as follows:

Agency
ACOA – St. John's
Government of NL - ITRD

We have also applied for Edge Status from the Government of Newfoundland and Labrador.

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Date Chief Executive Officer