

To: Impact Assessment Agency of Canada

Re: Canadian Impact Assessment Registry number 84597 --Marmorora Clean Energy Hub Project
“Indigenous peoples, stakeholders and the public more broadly want to be aware of, and have the opportunity to be involved earlier in, project planning activities. We agree that assessments should begin with a planning phase that occurs before project design elements are finalized in order to develop effective engagement strategies and foster greater collaboration between proponents, Indigenous peoples, stakeholders, the public and the government. We must also work together so that early engagement provides clarity and certainty to support efficient review processes.”

Due date : June 19,2023

Together the proponents: Ontario Power Generation and Northland Power with a detailed report prepared by Hatch

Purpose: To repurpose the abandoned open pit and inactive mining lands within the Municipality of Marmorora and Lake known as Armbro and then Aecon

Process: This study will be carried out in accordance with the requirements of the EAA. The first step of the process is the preparation of a Terms of Reference(ToR). The ToR will set out the proponent’s framework and work plan for addressing the EAA requirements when preparing the EA, including an outline of the studies, the alternatives that will be considered, and the public consultation activities that will be carried out to evaluate the alternatives and predict potential adverse impacts and mitigation.

The pumping storage hydroelectric facility is the only component that it subject to the EAA.

Comments and questions related to the above at random:

--**The Hatch Report**, a very detailed comprehensive report with information and charts collected over many years needs to be available to the general public in hardcopies and presented to the public at local public meetings with time for absorption/followup – full transparency. The report itself is full of unknowns. What it is not saying needs to be addressed. In this day and age with modern technology there could and should be a working model of the proposed pumping storage hydroelectric facility within the landscape. I suppose the ToR will address all these concerns????

--**Has the Hatch Report been peer reviewed?**

--**Summary of Engagement (Hatch Report page 5)** “NPI and OPG are committed to meaningful engagement. It creates access to information and opportunities for two-way communication. It opens doors to be heard and creates outcomes that everyone can be proud of. This is what we want to achieve with the Marmorora Project.”

How to achieve this commitment:

-Would like to have open public meetings with full engagement of the local public, in person, in an open forum like roundtable discussions and focus groups.

-Hatch Report speaks to numerous engagements with various stakeholders like the AFN but where are the summaries (minutes) of these engagements so the public can stay currently apprised

It is worth mentioning here that within a short distance from this site and in the Municipality of Marmora and Lake a truly open and transparent process happened with the **Deloro Cleanup Project**. There was a Public Liaison Committee established which met regularly, reports given, feedback from the public and recorded in minutes. This Liaison Committee met over decades as it had federal and provincial guidelines to follow with engineers involved and reports upgraded. That was a gold standard of transparency that could and should be duplicated even though the Deloro site was abandoned and became a public domain. The Ministry of the Environment, Conservation and Parks continue to hold Public Liaison Committee meetings once a year. The last one was July 19, 2022 in Deloro Town Hall.

There is an apparent difference when private ownership is involved—this site with proponents Northland Power and OPG – in my opinion should have to follow suit as if it was in the public domain—why different regulations? Who assumes the risk and liability for potential disasters? Will this be addressed in the ToR?

Past History of the current abandoned site (Marmoraton Mine Company)

--Mine closed in 1978 ---
Enclosed is documentation from Marmora & District Takes No Trash (T.N.T.) 2 pages which has relevant data presented at the time of active challenges by the community against the proposed pit being considered for Toronto garbage. (time frame of mid 1989 and into 1990's)

--Also enclosed are two pieces of correspondence from Armbro to the council of the day dated February 11, 1994 and June 1, 1994. Clearly even back then Armbro Marmora Holdings Inc. had many "Proposed Uses on Armbro Lands".

--With an amendment of the EPA (Environmental Protection Act) passed in 2004 waste disposal was banned in any lake . The Act defines a lake to be a body of water covering an area larger than 1 hectare. The water filled pit area of the abandoned site was confirmed as Marmoraton Mine Lake – although not ever formally named,-in correspondence on file dated May 2005 between the Clerk/CAO of the municipality, Frank Mills, and then Minister of Environment Leona Dombrowsky. Also Marmoraton Mine Lake is confirmed as fish inhabited which involves the Department of Fisheries and Oceans Canada. Section 35 of the Fisheries Acts states –"no person shall carry on any undertaking that results in the harmful alternation, disruption or destruction of fish habitat".

First will Northland Power and OPG acknowledge the existence of this large body of water as a lake and include an outline of studies that could possibly predict potential impacts on the fish/wildlife within the Marmoraton Mine Lake and mitigation? In the Hatch Report it is clearly identified as "Open Pit" and not a Lake which it is! What is the definition of an "Open Pit"?

Some further questions:

1. Who owns the current site?
 2. With the involvement of OPG does this mean my tax dollars are part of the funding that will be forthcoming?
 3. Where does zoning and related approvals factor into this new proposed use of the site- Provincial Policy Statement, Hastings County Official Plan, and Municipality of Marmora and Lake Comprehensive Zoning Bylaws? Will these be sidestepped?
 4. What feasibility studies have been done and what were the results –ie Parker Hydropower Services as per the June 1, 1994 Armbro Report (Page 3)?
 5. Why is the crushing Traprock operation not happening—it did provide road material for the 407 highway?
 6. Is there any government regulations (concerning noise etc.) in regard to the distance from this pumped storage facility in proximity to neighbouring residences, school, church and a nursing/retirement home that has been built since the closure of the mine?
 7. What are the potential alternatives that would be more in tune with the community safety, environmental and financial concerns especially those expressed by stakeholders? Hatch Report page 44 speaks to the “do nothing” approach.
- Of course all “additional criteria or modifications to existing criteria will be considered based on feedback received from the public, Indigenous communities/Nations, and government agencies.”

Finally as a comment I would like to express my disappointment in not having more time to study and read thoroughly the 116 + page Marmora Clean Energy Hub Project Initial Project Description dated May 1, 2023. Posted on agency website May19, 2023-- not giving enough time. To get a personal copy from the municipality I had to pay for it.

From: Bonnie Danes

Date: June 15, 2023.



Marmora & District Takes No Trash (T.N.T.)

THE LAKE THAT METRO MAY FILL WITH GARBAGE!

THE MARMORA OPEN PIT MINE:--

2,800 Feet (853 M) LONG; 1,500 Feet (457 M) WIDE;
COVERS AN AREA OF 75 Acres; IS 635 Feet (194 M) DEEP!
THE SURFACE IS 620 Feet (189 M) ABOVE SEA LEVEL.
THE BOTTOM IS 15 Feet (5 M) BELOW SEA LEVEL!

THE LAKE AS OF OCTOBER 1989 IS,

330 Feet (100 M) DEEP!
HOLDS 1.7 BILLION Gallons (6.4 BILLION Litres) OF
PURE SPRING WATER!
HOME TO RAINBOW TROUT UP TO 24" LONG PLUS OTHER FISH
SPECIES!
OFFICIALLY RECOGNIZED BY THE FEDERAL MINISTRY OF NATURAL
RESOURCES AS FISH HABITAT!

THE LAKE IS FILLING WITH PURE WATER AT THE RATE OF:--

320 Gallons (1,211 Litres) PER MINUTE!
19,200 Gallons (72,680 Litres) PER HOUR!
460,800 Gallons (1,744,320 Litres) PER DAY

IN THE SUMMER OF THE YEAR 2,009 THE LAKE WILL BE:--

580 Feet (175 M) DEEP AND
WILL HOLD 5 BILLION Gallons (18.8 BILLION Litres) OF PURE
SPRING WATER!

WATER SOURCE IS SPRINGS ALONG THE WALL AND THE BOTTOM, STARTING
40 Feet (12 M) FROM THE SURFACE. VIRTUALLY NO SURFACE RUNOFF.

RELATIVE TO THE MOIRA RIVER WATERSHED, THE LAKE IS:

820 Feet (250 M) FROM LILLEY CREEK
4,300 Feet (1,325 M) FROM MUD LAKE.

RELATIVE TO THE CROWE VALLEY WATER SYSTEM, THE LAKE IS:
4,600 Feet (1,400 M) FROM CROWE RIVER.

BOTH WATERSHEDS DRAIN TO THE BAY OF QUINTE!

HELP US PUT A STOP TO THIS TRAGEDY. Please send your donation
and a covering letter stating your objections (include a stamped,
self addressed envelope plus \$5.00 for a Membership) to:

MARMORA & DISTRICT TAKES NO TRASH (T.N.T.)
P.O. BOX 152
MARMORA, ONTARIO, K0K 2M0

All calculations were performed by Marmoraton Mine Company Engineers at the time the mine closed in 1978, and
are based on the amount of water that had to be pumped out of the mine, 24 hours a day, during its operation



Marmora & District Takes No Trash (T.N.T.)
P.O. Box 152,
Marmora, Ontario K0K 2M0

INFORMATION FACT SHEET

DATA ON MARMORA OPEN PIT MINE

Length	- 2800 feet (853 m)
Width	- 1500 feet (457 m)
Area	- 75 acres (30 ha)
Depth	- 635 feet (194 m)

The surface is 620 feet (189 m) above sea level
The bottom is 15 feet (5 m) below sea level
Ground (spring) water starts to flow in at the 580 foot (177 m)
level (40 feet (12 m) below the surface).
The present water level (October 1989) is 330 feet (100 m)
holding 1.7 billion gallons.

Following is the rate of in-flow of water:

<u>PER</u>	<u>GALLONS</u>	<u>LITRES</u>
minute	320	1,211
hour	19,200	72,680
day	460,800	1,744,320

This in-flow of ground water is more than double the consumption rate of the Village of Marmora.

The water will continue to rise to the 580 ft. level and this is calculated to occur in the summer of the year 2009, holding 5 billion gallons.

The above calculations were done by the Marmoraton Mine Company's engineers at the time of the mine closing in 1978. The calculations were based on the amount of water that had to be pumped out of the pit during operation. The source of this water is from springs along the wall and bottom of the pit. There is very little run-off into the pit because of the surrounding terrain.

The mine site is 820 feet (250 m) from Lilley Creek and 4300 feet (1325 m) from Mud Lake which form part of the Moira River watershed. The pit is 4600 feet (1400 m) from the Crowe River and the Crowe Valley water system. Both of these watersheds drain to the Bay of Quinte.



ARM BRO

February 11, 1994

The Council
Township of Marmora & Lake
P. O. Box 459, Highway #7 West
Marmora, Ontario
K0K 2M0

RE: MARMORATON MINE SITE

Dear Members of Council:

We would like to explore with you the possibility of developing a "public-private partnership" between Armbro and the Township of Marmora and Lake on above lands. In this way, we hope our relationship will lead to co-operation between us to put the Marmora site to a use that will benefit both the community and ourselves.

The subjects we can discuss are as follows:

1. An arrangement for the sale of a controlling interest in the "hole" part of the property, including a suitable surrounding land area, from Armbro to the Township.
2. Support by the Township for zoning and related approvals in applications to various government agencies and ministries for environmentally related activities on the balance of the property. These would include soil remediation, composting, recycling, controlled fill storage, general bulk storage, and pumped storage for hydropower generation. Receipt of Metro Toronto waste would be specifically prohibited and stated as such.
3. An agreement between the Township and Armbro to attempt to secure funding, jointly, from the Federal Government infrastructure program for the development of infrastructure in and around the above property.
4. Development of potential residential land forming part of our existing property.

Of course, we would be open to suggestions for additional ways in which we could further develop our co-operation.

25 Van Kirk Drive, Unit 8, Brampton, Ontario L7A 1A6
Tel: (905) 454-3737 Fax: (905) 454-5996



The spirit of our offer is summarized as follows:

- a) The Township gets control of the "hole". Zoning prohibits Metro Toronto waste. Therefore, the Metro Toronto waste question is resolved once and for all.
- b) Armbro gets clear approval and support for the development of environmentally related activities on the balance of the site, where applicable.
- c) The Township gets the opportunity to participate with Armbro in residential development, use of wet lands, etc.
- d) Cash available from the sale of Armbro's interest in the "hole", plus cash possibly available from the Federal infrastructure program, is invested in and around the property to "kick start" activity which will help quickly create jobs in the community.

We believe the above is an excellent example of "private-public partnership" and we are offering it to you so that we can all benefit - it is a win-win proposal.

We trust you will find the above of interest, and look forward to your response.

Yours very truly,

ARM BRO ENTERPRISES INC.

<original signed by>

John M. Beck
Chairman

P.S. We also expect to clarify the following:

- 1. Our aggregate crushing operations will continue permanently on the property. All stored materials remain the property of Armbro.
- 2. Buy/sell provisions will be required to resolve eventual ownership of jointly held assets, if required.
- 3. Shared benefits of any future additional infrastructure construction, such as sewage and water treatment facilities, will be agreed upon.



ARM BRO

June 1, 1994

Council for the Corporation of
the Township of Marmora and Lake
Township of Marmora and Lake
Box #459
Highway #7 West
Marmora, Ontario
K0K 2M0

Attn: Mr. Lionel Bennett, Reeve

Dear Sir;

Re: Proposed Uses on Armbro Lands

Mr. John Beck, our Chairman, has previously discussed with you the types of uses we are attempting to obtain for our Marmora lands. However, with the award of the 407 highway project to a consortium of which Armbro is a partner, Mr. Beck will be heavily involved in looking after our interests in that project. I will be continuing his efforts to pursue uses for our lands in Marmora.

Further to his last correspondence dated February 11, 1994, we are pleased to provide information on uses being investigated/proposed for Armbro's Marmora land holdings.

These uses include;

1. Soil Cleaning

a) Bio-Remediation

Proposed Use

Soils that are cleaned by bio-remediation contain hydrocarbons (gasoline, diesel, etc.). To degrade soil contaminants, most current bio-remediation projects use indigenous bacteria that feed off oxygen and the inorganic nutrients.

Bio-remediation can be as simple as spreading the contaminated soil and periodically turning it over to ensure good aeration, or sprinkling it to keep the soil moist and the nutrient levels high for the bacteria to flourish. The bacteria will then remove the hydrocarbons.

This is a slow process which can take 60 - 250 days to completely clean or remediate the soil.

The clean soil remains the property of the owner of the site from where it originally came. Arrangements for the soil's disposal, including it being returned to the original site, or left on the Marmora lands, or disposed of elsewhere, will be made with the soil owner.

Existing Status

Discussions have been held with several firms involved in site rehabilitation.

b) Low temperature thermal desorption (LTTD)

Proposed Use

This process is designed to treat soils containing light distillate petroleum hydrocarbons with special equipment designed for that purpose.

The contaminated soils are placed in a rotary drum/dryer. The soils are heated and the volatile compounds and moisture in the soil are desorbed by the heat supplied by a direct-firing burner. The cleaned soil is then cooled and moisture is added. Filters ensure no contaminants are emitted into the atmosphere.

The cleaning, or remediating process is completed much more quickly than cleaning by bio-remediation.

Existing Status

Armbro is in the process of obtaining Ministerial approval for an LTTD facility on their lands in Brampton. If the demand exists, the Marmora site could house a mobile facility to assist in cleaning soils in the surrounding area.

As with bioremediated soils, ownership of the soil remains with the owner.

2) Bio-solids Management

Proposed Use

Bio-solids are a bi-product of wastewater treatment plants.

High in nutrients they can be used, in conjunction with other materials, to rehabilitate the existing tailing piles with vegetation/tree growth. Alternatively, tree farming could be introduced on other areas of the property, using the bio-solids as a nutrient for tree growth.

Existing Status

Armbro has submitted a proposal to accept 8,200 dry tonnes of bio-solids for one year, with a possible extension, subject to conditions.

3) Hydropower

Proposed Use

To produce hydro electric power on the Marmora lands to sell to either Ontario Hydro or other users.

The water from the open quarry would be pumped to a reservoir constructed on top of the adjacent tailing pile, during the off peak evening hours.

Dropping the water back into the quarry during peak hours would create electric power which would be sold to users at the peak rates.

Existing Status

Armbro has entered into an agreement with Parker Hydropower Services to permit them to undertake a study of the feasibility of such a facility.

4) Composting

Proposed Use

A facility in Marmora, similar to one in the Regional Municipality of Halton. The process consists of placing material at one end of a 210 foot long bay which then vibrates and forces air into the material, as it slowly moves down the bay. At the end of 21 days, the material is fully composted. The finished product is either bagged and sold through retail outlets, or to landscapers, nurseries and golf courses.

The bays are within an enclosed building, so year round composting is possible. The aerobic process ensures odours are minimized, although exhaust air passes through filters before being released outside.

The compostible material would be a mixture of organic wastes generated by produce and grocery stores, food processing companies, municipal kitchen waste and municipal sewage treatment plants.

Existing Status

Equity Waste Management Inc. is proposing to fund, build and operate the facility in the Town of Halton Hills and they believe such a facility would also be appropriate on Armbro's Marmora site, and are anxious to continue discussions with Armbro.

5) Construction Waste Storage

Proposed Use

A portion of the site could be used to store construction rubble, i.e. building materials which can no longer be placed in landfills.

Existing Status

Discussions have taken place with large firms involved in demolition. The material could be later crushed and recycled.

6) Crushing Traprock

Existing Use

Armbro crushes the existing traprock and uses it for road construction purposes.

This use will continue on the site.

7) Explosive Storage

Existing Proposal

Armbro has been recently approached requesting permission to store explosives in a trailer within a 4 acre parcel.

CLL 400X400

The above uses are in various stages of development and all will be of benefit to the Community, adding to the employment and tax base.

Please see the attached plan for possible locations on the site for each of the proposed uses mentioned above.

Yours very truly,
ARMBRO MARMORA HOLDINGS INC.

<original signed by>

Paul Sudolski
President, and C.E.O.