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The Honourable Jonathan Wilkinson Minister of Environment and Climate Change Canada House of Commons Ottawa, ON K1A 0A6

SENT VIA EMAIL ec.ministre-minister.ec@canada.ca cc: ceaa.information.acee@canada.ca

July 23, 2021

Dear Minister Wilkinson,

# Re: Letter Requesting Ministerial Designation of Proposed Modifications to the Touquoy Gold Project in Nova Scotia

The Eastern Shore Forest Watch Association is a community organization that was founded in 1998 to address forestry practices and environmental issues that affect the health of the forests, wildlife, and human inhabitants of Nova Scotia's eastern shore.

We are aware that under subsection 9(1) of the *Impact Assessment Act* ("the *IAA*" or "the Act"), the Minister of Environment and Climate Change Canada ("ECCC") is empowered to designate for impact assessment a physical activity that is not prescribed by the *Physical Activities Regulations* if, in the Minister's opinion, either:

- (a) the carrying out of that activity may cause adverse effects within federal jurisdiction or adverse direct or incidental effects; or,
- (b) public concerns related to those effects warrant the designation.

We are writing to you on behalf of our membership and on behalf of the undersigned individuals, community groups, and environmental organizations to request that you exercise your power under subsection 9(1) of the *IAA* to require an impact assessment of activities that the corporation Atlantic Mining NS Inc ("Atlantic Gold") is proposing to carry out at the site of its existing Touquoy Gold Project in Moose River Gold Mines, Nova Scotia.

# 1.0 Description of the Proposed Activities: Proposed Modifications to the Touquoy Gold Project

The existing Touquoy Gold Project is an open-pit gold mining operation located in Moose River Gold Mines in Halifax County, Nova Scotia. Throughout this letter, we sometimes refer to the existing mine and its facilities as the Touquoy Mine.

The Touquoy Gold Project underwent a provincial environmental assessment in 2007 and was approved under Nova Scotia's *Environment Act* and corresponding *Environmental Assessment Regulations* ("*EAR*") in 2008. At the time, the project proponent was DDV Gold Limited ("DDV Gold"). The Touquoy Mine is now owned and operated by Atlantic Gold.

In addition to owning and operating the Touquoy Mine, Atlantic Gold has proposed to develop three new open-pit gold mining projects in Nova Scotia. Those proposed new projects are the Beaver Dam Mine Project, the Cochrane Hill Gold Project, and the Fifteen Mile Stream Gold Project. All three proposed projects are currently undergoing joint federal and provincial environmental assessments under the *Canadian Environmental Assessment Act*, 2012 ("CEAA 2012") and Nova Scotia's *Environment Act* and EAR.

As is clear from the environmental assessment documents that Atlantic Gold has submitted to date, all three of the proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream depend in large part upon plans to use the existing Touquoy Mine facilities to process ore that Atlantic Gold proposes to extract at the proposed new project sites <u>and</u> dispose of massive volumes of tailings created by that processing.

Based on the information that is currently available to the Impact Assessment Agency of Canada ("IAAC"), Nova Scotia Environment and Climate Change ("NSECC"), and the public, it appears that Atlantic Gold proposes to use the exhausted open pit at the Touquoy Mine ("the Touquoy Mine pit") as the permanent tailings impoundment area for at least 14 million tonnes of tailings generated from operations at the Touquoy Mine, the proposed Beaver Dam Mine Project, and the proposed Fifteen Mile Stream Gold Project. Those 14 million tonnes of tailings do not yet factor in the tailings that Atlantic Gold proposes to generate through the Cochrane Hill Gold Project, as those numbers are not yet available.

On July 16, 2021, NSECC notified the public that Atlantic Gold had registered proposed Touquoy Gold Project Modifications for a Class I environmental assessment under Nova Scotia's *Environment Act* and *EAR*. The Environmental Assessment Registration Document for the proposed modifications ("the TGPM EARD") is available online, and the window for public commentary will close on August 16, 2021.

NSECC has advised the public that Nova Scotia's Minister of Environment and Climate Change will render his decision on the proposed modifications on or before September 5, 2021.

The TGPM EARD summarizes the proposed modifications as follows:

AMNS [Atlantic Gold] is proposing modifications to the Approved Project to support the ongoing operation. These modifications include: use of the exhausted Open Pit for tailings disposal instead of the existing approved Tailings Management Facility (TMF); expansion of the Waste Rock Storage Area (WRSA); expansion of the Clay Borrow Area; and realignment of the Plant Access Road used to access the Plant Site. These proposed modifications will increase the current approved development area, or, in the case of the in-pit tailings disposal, present a new activity not previously assessed in the original Environmental Assessment (EA) process for the Touquoy Gold Project conducted in 2007.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See Nova Scotia Environment and Climate Change, "Fifteen Mile Stream Gold Project Round 1 Information Requirements" (22 June 2021) at comment ECC 160 ["NSECC IRs"].

<sup>&</sup>lt;sup>2</sup> Atlantic Mining NS Inc, "Touquoy Gold Project Modifications – Environmental Assessment Registration Document" (July 2021) at page 1.1 ["TGPM EARD"].

The TGPM EARD provides the following overview of the proposed use of the Touquoy Mine pit as a tailings impoundment area:

Currently, tailings from the processing of ore are deposited in the TMF [Tailings Management Facility]. However, the TMF is expected to reach its capacity for tailings in March 2022. The Open Pit is anticipated to be exhausted in 2022. AMNS [Atlantic Gold] is proposing to use the exhausted Open Pit for tailings disposal when the TMF reaches its design capacity. Once the Open Pit has been exhausted, it will be allowed to fill with groundwater, surface runoff and precipitation, creating the necessary conditions for tailings disposal. When the water level in the pit reach [sic] an elevation of 108 m, water will start to seep out to Moose River. The pit lake will be treated as a batch reactor with the objective of adjusting the pH to precipitate metals thus improving discharge quality. Water quality monitoring will determine if the surplus water can be directly discharged to Moose River via a constructed spillway or whether the surplus water must be pumped first to a treatment facility before it is suitable for discharge to the environment.<sup>3</sup>

The TGPM EARD describes the proposed expansion of the existing Waste Rock Storage Area ("WRSA") as being approximately 7.1 hectares,<sup>4</sup> and it describes the proposed expansion of the existing Clay Borrow Area as being approximately 5.9 hectares.<sup>5</sup> Although our comments in this letter focus mainly on the proposed new use of the Touquoy Mine pit as a tailings impoundment area, we are concerned about adverse environmental effects and adverse direct and incidental effects that could be caused by all four of the proposed modifications that the TGPM EARD describes.

As regards the proposed new use of the Touquoy Mine pit as a tailings impoundment area, we are aware that in the TGPM EARD, Atlantic Gold describes the proposed modifications as being necessary solely for ongoing operations at the Touquoy Mine and as being unrelated to Atlantic Gold's plans for its proposed "satellite" mines at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream. Notwithstanding Atlantic Gold's characterization of its new plans for the Touquoy Mine pit, our view is that the proposed modifications to the pit will not exclusively enable the pit to store tailings from the processing of ore that is currently stockpiled at the Touquoy Mine site but will set the stage for Atlantic Gold's proposed use of the pit as the final repository for tailings generated by the proposed operations at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream.

The ongoing environmental assessments of Atlantic Gold's proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream have split Atlantic Gold's comprehensive plans for the Touquoy Mine pit into three parts of what will ultimately be a four-part cumulation. The Environmental Impact Statement ("EIS") Guidelines that the Canadian Environmental Assessment Agency ("CEAA") and Nova Scotia Environment ("NSE") issued to Atlantic Gold for the proposed Beaver Dam Mine Project in January 2016 state that the scope of the proposed project includes "changes to processes and infrastructure at the Touquoy Mine site related to the Beaver Dam Project", including, among other things, "changes at the Touquoy Mine pit (if any) to accommodate the storage of tailings from the Beaver Dam Mine", "storage of tailings in the Touquoy Mine pit and related water management", and "any other changes in project components or activities from those previously assessed in the EA of the Touquoy Mine" (emphasis added). The EIS Guidelines that CEAA and NSE issued to Atlantic Gold for the

<sup>&</sup>lt;sup>3</sup> TGPM EARD at page xi.

<sup>&</sup>lt;sup>4</sup> *Ibid*.

<sup>&</sup>lt;sup>5</sup> *Ibid* at page xii.

<sup>&</sup>lt;sup>6</sup> See for example *ibid* at pages 4.4 and 5.2.

<sup>&</sup>lt;sup>7</sup> Canadian Environmental Assessment Agency and Nova Scotia Environment, "Guidelines for the Preparation of an Environmental Impact Statement pursuant to the *Canadian Environmental Assessment Act*, 2012 and Nova Scotia

proposed Cochrane Hill Gold Project and Fifteen Mile Stream Gold Project include substantially the same language but focus on changes associated specifically with each of those proposed projects, respectively.<sup>8</sup>

In other words, each of the three environmental assessments that are currently being conducted for Atlantic Gold's proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream are attempting to address, separately and respectively, the changes to the existing Touquoy Mine facilities that each project will require. Although attention is being paid to the cumulative effects associated with Atlantic Gold's comprehensive plans for the Touquoy Mine pit, so far it appears to be proving difficult for IAAC and NSECC to get a complete picture of Atlantic Gold's comprehensive plans for the site.

This apportioned assessment of Atlantic Gold's comprehensive plans for the Touquoy Mine pit is already generating confusion and inconsistencies, as we address in more detail below. If Atlantic Gold's proposed modifications to the Touquoy Mine pit are assessed through a provincial environmental assessment alone instead of through a federal impact assessment, the assessment of Atlantic Gold's comprehensive plans for the pit will look like this:

- apportioned assessment of changes necessary for the proposed Beaver Dam Mine Project (joint federal and provincial environmental assessment with IAAC oversight);
- apportioned assessment of changes necessary for the proposed Cochrane Hill Gold Project (joint federal and provincial environmental assessment with IAAC oversight);
- apportioned assessment of changes necessary for the proposed Fifteen Mile Stream Gold Project (joint federal and provincial environmental assessment with IAAC oversight);
- apportioned assessment of changes necessary for the continued operation of the Touquoy Gold Project and proposed new use of the Touquoy Mine pit (provincial environmental assessment without IAAC oversight).

Given the fundamental interconnectedness of these proposed projects and proposed changes, we are concerned that allowing the apportioned assessment of the proposed modifications to the Touquoy Gold Project to proceed as a provincial environmental assessment instead of a collaborative impact assessment under the *IAA* will exacerbate the confusion and inconsistencies that are already becoming apparent.

Registration Document pursuant to the *Nova Scotia Environment Act*: Beaver Dam Mine, Atlantic Gold Corporation" (January 2016) at page 4.

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<sup>&</sup>lt;sup>8</sup> See Canadian Environmental Assessment Agency and Nova Scotia Environment, "Guidelines for the Preparation of an Environmental Impact Statement pursuant to the Canadian Environmental Assessment Act, 2012 and Nova Scotia Registration Document pursuant to the Nova Scotia Environment Act: Fifteen Mile Stream Gold Project, Atlantic Mining NS Corp" (August 2018) at page 4. These EIS Guidelines include within the scope of the proposed Fifteen Mile Stream Gold Project "changes at the Touquoy Mine pit (if any) to accommodate the storage of tailings from the Fifteen Mile Stream Gold Project", "storage of tailings in the Touquoy Mine pit and related water management", and "any other changes in project components or activities from those previously assessed in the EA of the Touquoy Mine" (emphasis added). See also Canadian Environmental Assessment Agency and Nova Scotia Environment, "Guidelines for the Preparation of an Environmental Impact Statement pursuant to the Canadian Environmental Assessment Act, 2012 and Nova Scotia Registration Document pursuant to the Nova Scotia Environment Act: Cochrane Hill Gold Project, Atlantic Mining NS Corp" (January 2019) at page 4. These EIS Guidelines include within the scope of the proposed Cochrane Hill Gold Project "changes at the Touquoy Mine pit (if any) to accommodate the storage of tailings from the Cochrane Hill Gold Project", "storage of tailings in the Touquoy Mine pit and related water management, including water and wastewater treatment", and "any other changes in project components or activities from those previously assessed in the EA of the Touquoy Mine" (emphasis added).

Last month, NSECC delivered Information Requirements ("IRs") to Atlantic Gold that we believe are worth reproducing at length:

I compiled the tailings numbers that AMNS is proposing to deposit in the exhausted Touquoy Pit

in the following table:

Site	Tailings Tonnes (Mt)	Tailings Volume (Mm³)	Reference
Touquoy	6.5	4.629 <sup>1</sup>	Jim Millard from April 13, 2021 EA
			Scoping Meeting
Beaver Dam	7.25	5.577	Beaver Dam EIS Document, Appendix G.2
FMS	0.534	0.411	FMS EIS Document, Appendix I.6
<b>Total Tailings</b>	14.284	10.617	
Total Water		8.589	FMS EIS Document, Appendix I.6 (Figure
			4.5)
Total Water +		19.206	
Tailings			

<sup>&</sup>lt;sup>1</sup> Density of 1.404 t/m3 reported in the Water Balance Revision #14 dated December 23, 2020.

The FMS EIS Document states the following volumes (please note they presented two different capacities for the Touquoy exhausted pit, I have this as one of comments):

- Exhausted Touquoy Pit Capacity 1: **11.83 Mm³** (at the spillway elevation of 108 masl), EIS Document Section 8.5.4.2.2.4
- Exhausted Touquoy Pit Capacity 2: **8.962 Mm**<sup>3</sup> (at the spillway elevation of 108 masl), EIS Document, Appendix L.1
- Estimated total deposited tailings from all sites into exhausted Touquoy Pit: 7.91 Mm<sup>3</sup>, EIS Document Section 8.5.4.2.2.4

The numbers are not adding up, the exhausted pit will either be:

- a) Almost at capacity with tailings only (not including any water) or
- b) Cannot accommodate the total estimated tailings to be deposited in the exhausted Touquoy Pit (again, not including water and concentrate from Cochrane Hill)

I suggest requesting the Touquoy exhausted pit water balance for all 4 projects (Touquoy stockpile processing, FMS, BD and CH) because the numbers submitted separately are not adding up.<sup>9</sup>

These comments highlight concerning inconsistencies and gaps in the information that Atlantic Gold has provided to date concerning its comprehensive plans for the Touquoy Mine pit. <sup>10</sup> Additionally, IRs that IAAC delivered to Atlantic Gold last month identify other unanswered questions and issues that have not yet been addressed. <sup>11</sup>

<sup>&</sup>lt;sup>2</sup> Total number does not include concentrate from the Cochrane Hill project which is also planned to be deposited into the Touquoy exhausted pit.

<sup>&</sup>lt;sup>9</sup> NSECC IRs at comment ECC 160.

<sup>&</sup>lt;sup>10</sup> See also NSECC IRs at comments ECC 150, ECC 151, ECC 153. It is also worth noting that in the TGPM EARD, Atlantic Gold describes the total capacity of the Touquoy Mine pit "at the proposed spillway elevation of 108 m" as being 8.962 Mm³, and it describes the estimated total volume of tailings from the Touquoy Mine to be deposited in the pit as being 6.03 Mt: see TGPM EARD at page 2.3. These numbers add further inconsistencies to the numbers cited above.

<sup>&</sup>lt;sup>11</sup> See for example Impact Assessment Agency of Canada, "Fifteen Mile Stream Gold Project – Information Requirements (Round 1, Part 1)" (15 June 2021) at comments IR-42, IR-46, IR-47, IR 53 ["IAAC IRs"].

These recent IRs issued by IAAC and NSECC illustrate the confusion and uncertainties that are arising through the apportioned assessment of Atlantic Gold's comprehensive plans for the Touquoy Mine pit. We believe that this situation is concerning enough to merit an impact assessment of the proposed modifications to the Touquoy Gold Project which Atlantic Gold has registered for a provincial environmental assessment.

We understand Atlantic Gold's proposed modifications to the Touquoy Gold Project as being inherently connected to the proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream, and we are therefore concerned that assessing the proposed modifications through a provincial environmental assessment alone would exacerbate the problems that are already emerging in the environmental assessments that the proposed new projects are undergoing. We are also concerned that the mitigation measures currently being proposed and assessed in connection with Atlantic Gold's plans for the Touquoy Mine pit may not be addressing Atlantic Gold's plans comprehensively because they are being assessed in an apportioned manner as components of several "separate" projects.

Information about Atlantic Gold's comprehensive plans for the Touquoy Mine pit is already coming to IAAC in a piecemeal manner through the three separate environmental assessment processes that have been triggered federally. A provincial environmental assessment conducted without IAAC oversight will make it even more difficult for IAAC to form a clear and complete understanding of Atlantic Gold's comprehensive plans for the Touquoy Mine pit. Without that understanding, IAAC cannot properly assess the adverse effects within federal jurisdiction, adverse direct or incidental effects, and cumulative effects that Atlantic Gold's comprehensive plans for the Touquoy Mine pit may cause.

### 2.0 Detailed Reasons for Designation: Relevant IAA and IAAC Policy Factors

### 2.1 The Project May Cause Adverse Effects within Federal Jurisdiction

For the purposes of subsection 9(1) of the *IAA*, "effects within federal jurisdiction" are defined by section 2 of the Act. The following subsections of this letter address the effects within federal jurisdiction that we believe are most relevant to our request. Other effects within federal jurisdiction may be relevant as well.

### 2.1.1 The Project May Adversely Affect Fish, Fish Habitat, and Aquatic Species

For the purposes of subsection 9(1) of the *IAA*, effects to fish, fish habitat, and aquatic species are effects within federal jurisdiction. In this context, the word "fish" includes parts of fish, shellfish, crustaceans, marine animals, and any parts of shellfish, crustaceans, or marine animals, as well as the eggs, sperm, spawn, larvae, spat, and juvenile stages of fish, shellfish, crustaceans, and marine animals. <sup>12</sup> "Fish habitat" means "water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas". <sup>13</sup> An "aquatic species" is either a fish, as defined above, or a marine plant, including all benthic and detached algae, marine flowering plants, brown algae, red algae, green algae, and phytoplankton. <sup>14</sup>

The EARD and Focus Report that were prepared for the Touquoy Gold Project when it underwent a provincial environmental assessment in 2007 suggest that using the Touquoy Mine pit to store tailings

<sup>&</sup>lt;sup>12</sup> See *Impact Assessment Act*, SC 2019, c 28, s 1 at section 2 and *Fisheries Act*, RSC 1985, C F-14 at subsection 2(1).

<sup>&</sup>lt;sup>13</sup> *Ihid*.

<sup>&</sup>lt;sup>14</sup> See *Impact Assessment Act*, SC 2019, c 28, s 1 at section 2, *Species at Risk Act*, SC 2002, c 29 at subsection 2(1), and *Fisheries Act*, RSC 1985, C F-14 at section 47.

may adversely affect fish, fish habitat, and aquatic species. The EARD noted several watercourses in the vicinity of the Touquoy Gold Project, including Fish River and Moose River. <sup>15</sup> Appendix K of the EARD, which provided wetland evaluations, repeatedly described Fish River and Moose River as having "sensitive fish habitat". <sup>16</sup>

Multiple sections of the TGPM EARD indicate that Atlantic Gold's proposed modifications to the Touquoy Gold Project could adversely affect fish, fish habitat, and aquatic species. As the document states:

Fish and fish habitat have the potential to be affected by Project-related changes to groundwater resources (Section 6.0), surface water resources (Section 7.0) and terrestrial environment (e.g., wetlands) (Section 9.0) through effects such as the removal of riparian vegetation, alterations to stream flow, introduction of sediments and contaminants of potential concern (COPC), alteration of groundwater quantity and quality, and water management activities that result in changes in water levels in surrounding waterbodies.<sup>17</sup>

Notably, the TGPM EARD acknowledges that Atlantic salmon are "known to occur in Moose River", <sup>18</sup> and it lists 13 species of fish that are "confirmed to be present in the upper Fish River Watershed", all of which are also "assumed to be present in Moose River". <sup>19</sup> Those species include the American eel. While all of the species identified are ecologically valuable, it is worth emphasizing that American eel and Atlantic salmon have special cultural significance for the Mi'kmaq of Nova Scotia and are also species of conservation concern.

Section 6.0 of the TGPM EARD addresses potential changes to groundwater resources and notes, among other things, that proposed activities are expected to reduce the baseflow to Moose River and may result in changes to groundwater quality as well as quantity.<sup>20</sup> The document states:

The deposition of tailings into the exhausted Open Pit has the potential to interact with groundwater quality around the Open Pit, as well as water quality in Moose River from groundwater seepage into the river. Groundwater in the filled Open Pit has the potential to seep to Moose River during the post-closure phase of the Project.<sup>21</sup>

### The TGPM EARD goes on to state:

During the post-closure period, the deposition of tailings in the Open Pit will affect the water quality in the pit, including the pore water quality in the tailings within the Open Pit. This lower quality water has the potential to migrate toward Moose River via groundwater.

According to the TGPM EARD, groundwater modelling conducted by Stantec indicates that average concentrations of arsenic and "parameters of primary concern" would not stabilize in Moose River until

<sup>20</sup> *Ibid* at pages 6.16 and 6.24.

7

<sup>&</sup>lt;sup>15</sup> DDV Gold Limited, "Environmental Assessment Registration Document for the Touquoy Gold Project, Moose River Gold Mines, Nova Scotia" (March 2007) at pages 96-102 ["Touquoy Gold Project EARD"].

<sup>&</sup>lt;sup>16</sup> Touquoy Gold Project EARD, Appendix K – Wetland Evaluations: "Wetland 1 Report" at page 8, "Wetland 2 Report" at page 9, "Wetland 3 Report" at page 7, "Wetland 4 Report" at page 8, and "Wetland 5 Report" at page 8. <sup>17</sup> TGPM EARD at page 8.1.

<sup>&</sup>lt;sup>18</sup> *Ibid* at page 8.13; see also page 8.15, which states that sea-run (as opposed to land-locked) Atlantic salmon are "known to occur in Moose River".

<sup>&</sup>lt;sup>19</sup> *Ibid* at page 8.14.

<sup>&</sup>lt;sup>21</sup> *Ibid* at page 6.25.

after approximately 150 years.<sup>22</sup> Notably, after Atlantic Gold provided similar figures in its EIS for the proposed Fifteen Mile Stream Gold Project, IAAC IRs commented:

Section 6.5.6.2 of the EIS indicates that the concentrations of all parameters at the property line after 500 years of travel are predicted to be less than the Canadian Drinking Water Guidelines. The average concentrations in the discharge to Moose River stabilize after about 150 years. Based on this definition it would seem that the effects could be considered significant as 500 years to return to baseline is well beyond a reasonable amount to time [sic] to monitor the site.

Section 7.0 of the TGPM EARD addresses potential changes to surface water resources and notes, among other things, that proposed activities could result in changes to surface water quality and quantity.<sup>23</sup> For example, the document states:

In-pit tailings disposal will potentially interact with surface water resources through alterations of water quality and quantity associated with the deposition of tailings, related associated water management activities, and reclamation and decommissioning activities. [...] As the Open Pit starts to fill with tailings and water, the groundwater flow gradients to the Open Pit will lessen and eventually reverse, at which time water in the Open Pit will seep towards the Moose River. When the Open Pit infilling is complete, surface flow will be directed to Moose River via a constructed spillway or discharge structure.<sup>24</sup> [emphasis added]

These potential changes to groundwater and surface water quality and quantity in Moose River clearly have the potential to adversely affect fish, fish habitat, and aquatic species.

The potential threats to fish, fish habitat, and aquatic species that we have addressed in this part of our letter are intended to serve as illustrative examples only: the TGPM EARD raises several other concerns about other adverse effects to these important species and habitat areas.

### 2.1.2 The Project May Adversely Affect Migratory Birds

The TGPM EARD identifies five avian species at risk that are "predicted to occupy lands" that are within the Local Assessment Area of the proposed project. Those species are: Barn Swallow (which is designated as "endangered" under Nova Scotia's *Endangered Species Act* ["*ESA*"] and "threatened" under the federal *Species at Risk Act* ["*SARA*"]), Canada Warbler (*ESA* "endangered"; *SARA* "threatened"), Common Nighthawk (*ESA* "threatened"; *SARA* "threatened"), Olive-sided Flycatcher (*ESA* "endangered"; *SARA* "threatened"), and Eastern Wood-pewee (*ESA* "vulnerable"; *SARA* "special concern"). All five of these species are migratory birds that are protected under the *Migratory Birds Convention Act* ("*MBCA*"), and adverse effects on these species and other relevant avian species mentioned within the TGPM EARD are effects within federal jurisdiction.

### 2.1.3 The Project May Adversely Affect Mi'kmag in Nova Scotia

For the purposes of subsection 9(1) of the *IAA*, effects within federal jurisdiction include effects occurring in Canada and resulting from any change to the environment on the physical and cultural heritage, current use of lands and resources for traditional purposes, and health, social, or economic conditions of the

8

<sup>&</sup>lt;sup>22</sup> TGPM EARD at page 6.32.

<sup>&</sup>lt;sup>23</sup> *Ibid* at page 7.27.

<sup>&</sup>lt;sup>24</sup> *Ibid* at page 7.28.

<sup>&</sup>lt;sup>25</sup> *Ibid* at page 9.52.

<sup>&</sup>lt;sup>26</sup> *Ibid*.

Indigenous peoples of Canada, as well as effects on structures, sites, or things that are of historical, archaeological, paleontological, or architectural significance to the Indigenous peoples of Canada.

Mi'kmaw rights and interests do not appear to have been considered substantively in the EARD and Focus Report that were produced during the environmental assessment of the Touquoy Gold Project in 2007. The TGPM EARD indicates that recent engagement with Mi'kmaw communities and representatives in Nova Scotia identified several concerns raised by Mi'kmaq, including concerns about potential impacts on local water resources, potential impacts to fish and fish habitat, and potential impacts on traditional practices such as harvesting and hunting. Importantly, these potential impacts could adversely affect Mi'kmaw Aboriginal and treaty rights that are protected under section 35 of the Constitution Act, 1982 and could adversely affect other Mi'kmaw rights and interests that are protected under Canadian and international law.

### 2.2 The Project May Cause Adverse Direct or Incidental Effects

Under subsection 9(1) of the *IAA*, the Minister may designate a physical activity that is not prescribed in the *Physical Activities Regulations* if, in his opinion, the carrying out of that activity may cause adverse direct or incidental effects. Section 2 of the *IAA* defines "direct or incidental effects" as meaning:

[...] effects that are directly linked or necessarily incidental to a federal authority's exercise of a power or performance of a duty or function that would permit the carrying out, in whole or in part, of a physical activity or designated project, or to a federal authority's provision of financial assistance to a person for the purpose of enabling that activity or project to be carried out, in whole or in part. (emphasis added)

The creation of the tailings impoundment area that Atlantic Gold envisions in its comprehensive plans for the Touquoy Mine pit would implicate ECCC's duties and functions under Canada's *Metal and Diamond Mining Effluent Regulations* ("the *MDMER*" or "the regulations"), which exist under the *Fisheries Act*. It is our understanding that Atlantic Gold's proposed use of the Touquoy Mine pit may fall within the scope of paragraph 5(1)(b) of the *MDMER*, which authorizes the deposit of prescribed substances into a tailings impoundment area that is "a disposal area that is confined by anthropogenic or natural structures or by both, other than a disposal area that is, or is part of, a natural water body that is frequented by fish". Importantly, subsection 5(2) of the *MDMER* makes it clear that the authorization granted by paragraph 5(1)(b) is conditional on the proponent complying with sections 7 to 28 of the regulations, which list several monitoring and reporting obligations with which proponents must comply. Proponents' monitoring and reporting obligations under sections 7 to 28 of the *MDMER* necessarily invoke corresponding oversight and enforcement duties and functions for ECCC.

Atlantic Gold's proposed modifications to the Touquoy Mine pit are activities that, if carried out, may cause adverse direct or incidental effects—namely, adverse effects that would be directly linked or necessarily incidental to the ECCC's performance of oversight and enforcement duties and functions under the *MDMER*. Within the legal regime that exists under the *Fisheries Act*, the Touquoy Mine pit cannot lawfully be used to store tailings unless that use conforms with the *MDMER*. As regards Atlantic Gold's proposed use of the Touquoy Mine pit to store tailings, ECCC's oversight and enforcement duties and functions under the *MDMER* would effectively give Atlantic Gold licence to use the Touquoy Mine

<sup>&</sup>lt;sup>27</sup> TGPM EARD at page 4.2.

<sup>&</sup>lt;sup>28</sup> Given the groundwater connectivity described in the TGPM EARD, the anticipated seepage to Moose River, and the anticipated discharge to Moose River, the application of paragraph 5(1)(b) of the *MDMER* is questionable, as the "confinement" provided by the proposed disposal area will apparently not prevent escape, and as, ultimately, an established connection between the "pit lake" and Moose River is planned.

pit as a tailings impoundment area so long as all relevant monitoring and reporting requirements were being met. In other words, <u>ECCC's performance of oversight and enforcement duties and functions under</u> the *MDMER* is fundamental to enabling the use of the Touquoy Mine pit to store tailings.

Although ECCC may not need to exercise a power or perform a duty or function to enable physical modifications to the Touquoy Mine pit, Atlantic Gold's proposed "modifications" to the pit are not simply physical changes to the structure of the pit itself. What the TGPM EARD is proposing as a "modification" to the Touquoy Mine pit is in large part—it may even be fair to say is primarily—the actual use of the pit to store massive volumes of tailings. The potential adverse effects of that aspect of the proposed project (that is, the actual use of the Touquoy Mine pit as a permanent tailings impoundment area—a use that was never contemplated in the original environmental assessment of the project) are discussed at length throughout the TGPM EARD. As such, the TGPM EARD illustrates the kinds of adverse direct and incidental effects that could flow from ECCC's role in licencing the use of the Touquoy Mine pit as a tailings impoundment area by virtue of performing its oversight and enforcement duties and functions under the MDMER.

As our comments in earlier sections of this letter suggest, the adverse effects about which we are especially concerned are the adverse effects to local groundwater and surface water that could be caused by using the Touquoy Mine pit as the permanent disposal site for massive volumes of tailings. Those adverse effects include adverse effects on fish, fish habitat, and aquatic species.

# 2.3 Public Concerns Related to Adverse Effects within Federal Jurisdiction and Adverse Direct or Incidental Effects Warrant the Designation

Under subsection 9(1) of the *IAA*, the Minister may designate a physical activity that is not prescribed in the *Physical Activities Regulations* if, in his opinion, public concerns related to adverse effects within federal jurisdiction or adverse direct or incidental effects warrant the designation. Importantly, this power to designate is distinct from the other power that is granted by subsection 9(1), under which the Minister is also empowered to designate a physical activity if, in his opinion, the carrying out of that physical activity may cause adverse effects within federal jurisdiction or adverse direct or incidental effects. The difference between the two powers is that whereas one requires the Minister to be of the opinion that the physical activity in question may cause relevant adverse effects, the other enables the Minister to designate an activity in order to address public concerns about relevant adverse effects, whether or not it is clear that such effects may actually occur.

As IAAC is aware, the documents that have been generated to date for the ongoing environmental assessments of Atlantic Gold's proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream number in the thousands of pages, and many of the documents are highly technical. The TGPM EARD is more than 300 pages long, not counting its appendices. Concerned members of the public who participate in environmental or impact assessment processes rarely have the resources required to review such vast materials comprehensively and assess, on a technical basis, the accuracy and completeness of the information provided by the proponent. The Minister's authority under subsection 9(1) of the *IAA* to designate an activity in order to address public concerns about relevant adverse effects reduces the burden that concerned members of the public might otherwise bear if they were required to convince the Minister that one or more proposed activities may actually cause relevant adverse effects.

Eastern Shore Forest Watch and the other signatories to this letter are deeply concerned about the adverse effects within federal jurisdiction and the adverse direct or incidental effects that could be caused by Atlantic Gold's proposed modifications to the Touquoy Gold Project. We are especially concerned about the relevant adverse effects that could result from Atlantic Gold's proposed use of the Touquoy Mine pit to store massive volumes of tailings generated by the processing of ore from the existing Touquoy Mine

<u>and</u> the proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream. Our request for Ministerial designation is not restricted to those proposed modifications alone, however, and we ask that IAAC and the Minister determine whether any or all of the other proposed modifications to the Touquoy Gold Project should be included in a federal impact assessment.

Additionally, in our view, the numerous comments that IAAC, NSECC, and Atlantic Gold have received from the settler public and from Mi'kmaq in Nova Scotia concerning the proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream illustrate significant public concerns about the individual and cumulative impacts of Atlantic Gold's activities in this province. We therefore ask that you also take those comments into account in your consideration of this request for Ministerial designation of the proposed modifications to the Touquoy Gold Project.

### 3.0 Additional Factors for Consideration

#### 3.1 Cumulative Effects

3.1.1 Atlantic Gold's Comprehensive Plans for the Touquoy Mine Pit Should Be Assessed in Their Entirety with IAAC Oversight

IAAC's Operational Guide: Designating a Project under the Impact Assessment Act states that when IAAC develops a recommendation for the Minister in connection with a request for Ministerial designation, IAAC may "take into account a number of relevant factors including whether or not" "there are proposals for multiple activities within the same region that may be a source of cumulative effects". Notably, the environmental assessment regime that exists under Nova Scotia's Environment Act and EAR does not include cumulative effects assessment as a legislated requirement.

As we have argued throughout this letter, Atlantic Gold's proposed modifications to the Touquoy Mine pit are one part of a four-part cumulative plan, and we are deeply concerned that if all four parts of that plan are not assessed comprehensively and cumulatively with IAAC oversight, the full potential for adverse effects within federal jurisdiction and adverse direct or incidental effects will not be understood.

We have already provided examples illustrating that the apportioned assessment of Atlantic Gold's comprehensive plans for the Touquoy Mine pit is already creating confusion and inconsistencies. As another example, we note that in the IAAC IRs discussed above, IAAC wrote:

The EIS Guidelines state that the scope of the EIS includes changes to processes and infrastructure at the Touquoy Mine site related to the FMS [Fifteen Mile Stream Gold Project], including: storage of tailings in the Touquoy Mine pit and related water management.

Section 3.0 of Appendix I.6 of the EIS states that the Touquoy pit has a volume of 8.962 million cubic metres and that the expected volume of tailings from the FMS is 0.411 million cubic metres. However, the volume of tailings expected to be deposited in the Touquoy pit from the Touquoy mine, Beaver Dam mine, and Cochrane Hill mine is not provided. In addition, the amount of water the pit is expected to accommodate is not provided.

This information is required to determine the amount of tailings to be stored in the Touquoy pit from the Touquoy, Beaver Dam, and Cochrane Hill mines and to understand the current status of the water management at the Touquoy site.<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> IAAC IRs at comment IR-47.

The apportioned assessment of Atlantic Gold's comprehensive plans for the Touquoy Mine pit is problematic, in our view, and we are concerned that allowing the fourth part of Atlantic Gold's four-part plan to be assessed in a provincial environmental assessment conducted without IAAC oversight will exacerbate the problem. Without the benefit of an impact assessment that examines Atlantic Gold's comprehensive plans for the Touquoy Mine pit, IAAC cannot properly assess the cumulative effects those plans may cause.

### 3.1.2 Proposed Effects on Wetlands Must Be Assessed Cumulatively

The TGPM EARD makes it clear that the proposed modifications to the Touquoy Gold Project would impact wetlands if they were approved, including a Wetland of Special Significance (as defined within Nova Scotian law and policy) in which Blue Felt Lichen (which is designated as a "vulnerable" species under Nova Scotia's *ESA*) is present.<sup>30</sup>

Importantly, Atlantic Gold's proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream also involve significant proposed alterations to wetlands, including activities that would more appropriately be described as destruction. In our view, all of these proposed effects on wetlands should be assessed cumulatively. As we noted above, the environmental assessment regime that exists under Nova Scotia's *Environment Act* and *EAR* does not include cumulative effects assessment as a legislated requirement.

### 3.2 The Proposed Activities Are in an Environmentally Sensitive Area

The Touquoy Gold Project and its proposed expansions are situated within an environmentally sensitive area that includes sensitive fish habitat, multiple watercourses, wetlands (including a Wetland of Special Significance), and other forested and vegetated areas that provide significant species habitats and ecosystem services.

For the purposes of the TGPM EARD, the Project Development Area ("PDA") "represents the anticipated area of direct physical disturbance associated with construction, operation and decommissioning of the Project" and "comprises the existing Open Pit, the WRSA Expansion Area, the new Clay Borrow Area", and the area of the proposed new access road. Additionally, the Local Assessment Area ("LAA") "encompasses the area within which Project-related environmental effects can be predicted or measured for assessment". 22

The TGPM EARD identifies a Wetland of Special Significance inhabited by the Blue Felt Lichen, which is designated as "vulnerable" under Nova Scotia's *ESA*, within the LAA.<sup>33</sup> As we noted above, the TGPM EARD also identifies five avian species at risk that are "predicted to occupy lands within the LAA".<sup>34</sup> Those species are: Barn Swallow (*ESA* "endangered"; *SARA* "threatened"), Canada Warbler (*ESA* "endangered"; *SARA* "threatened"), Common Nighthawk (*ESA* "threatened"; *SARA* "threatened"), Olivesided Flycatcher (*ESA* "endangered"; *SARA* "threatened"), and Eastern Wood-pewee (*ESA* "vulnerable"; *SARA* "special concern").<sup>35</sup> All five of these species are also protected under the *MBCA*.

<sup>33</sup> *Ibid* at page 9.51.

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<sup>&</sup>lt;sup>30</sup> TGPM EARD at page 9.51.

<sup>&</sup>lt;sup>31</sup> *Ibid* at page 5.7.

<sup>&</sup>lt;sup>32</sup> *Ibid*.

<sup>&</sup>lt;sup>34</sup> *Ibid* at page 9.52.

<sup>&</sup>lt;sup>35</sup> *Ibid*.

Additionally, it is well known in Nova Scotia that wetlands provide important habitat areas for many wildlife species, including the endangered Mainland Moose. Suitable moose habitat in mainland Nova Scotia is concerningly scarce. The TGPM EARD indicates that Mainland Moose inhabit areas within the vicinity of the Touquoy Mine,<sup>36</sup> and we are concerned that expanding the site and using the Touquoy Mine pit as a tailings impoundment area (with its corresponding risks to the local watersheds) could adversely affect this imperilled and culturally significant species.

These examples are just a few among many that could speak to the environmental sensitivity of the area affected by the Touquoy Mine.

### 3.3 Threshold

It is our understanding that the proposed modifications to the Touquoy Gold Project are not near a threshold set out in the *Physical Activities Regulations*.

## 3.4 Technological Considerations

We are not aware of any plans to use new or emerging technologies or of any other technological considerations that might be relevant to our request.

### 4.0 Conclusion

When the Touquoy Gold Project underwent a provincial environmental assessment in 2007, the proposed closure and reclamation plan for the exhausted Touquoy Mine pit envisioned that the empty pit would slowly fill with water and eventually become a "lake".<sup>37</sup> Remarkably, the Focus Report that DDV Gold submitted in 2007 even went so far as to say that after the exhausted pit had flooded and formed a lake, it would "develop into a viable aquatic habitat".<sup>38</sup>

In our view, DDV Gold's early reclamation vision for the exhausted Touquoy Mine pit cannot be reconciled with Atlantic Gold's comprehensive plans to use the pit as a massive tailings impoundment area. As recent IRs from NSECC, reproduced above, make clear, Atlantic Gold's comprehensive plans for the Touquoy Mine pit envision depositing such large volumes of tailings that the current capacity of the pit may not even be able to hold them.

When the Touquoy Gold Project underwent its provincial environmental assessment in 2007, the project was not assessed with the understanding that the exhausted open pit would be used as the permanent impoundment area for millions of tonnes of tailings. As we understand Atlantic Gold's comprehensive plans for the Touquoy Mine pit, the proposed modifications described in the TGPM EARD will not exclusively enable the pit to store tailings from the processing of ore that is currently stockpiled at the Touquoy Mine site but will also enable the use of the Touquoy Mine pit as the final repository for tailings generated by the proposed new projects at Beaver Dam, Cochrane Hill, and Fifteen Mile Stream. In our view, these proposed "modifications" go far beyond what the average person would consider to be modifications of an existing project. These modifications are integral to an entirely new vision for the Touquoy Mine pit, and we believe that vision requires an impact assessment in order to be properly understood.

<sup>&</sup>lt;sup>36</sup> TGPM EARD at page 9.57.

<sup>&</sup>lt;sup>37</sup> 2007 EA Focus Report at page 285.

<sup>&</sup>lt;sup>38</sup> *Ibid*.

Without the benefit of an impact assessment, IAAC cannot properly assess the adverse effects within federal jurisdiction, adverse direct or incidental effects, and cumulative effects that Atlantic Gold's comprehensive plans for the Touquoy Mine pit may cause. Additionally, other aspects of Atlantic Gold's proposed modifications to the existing Touquoy Gold Project may also warrant federal impact assessment, not least because of their contributions to the cumulative effects of proposed open-pit gold mining projects in the region.

For these reasons, Eastern Shore Forest Watch and the undersigned individuals, community groups, and organizations respectfully request that you exercise your powers under subsection 9(1) of the *IAA* and designate Atlantic Gold's proposed modifications to the Touquoy Gold Project for impact assessment.

Finally, as NSECC has advised the public that Nova Scotia's Minister of Environment and Climate Change will render his decision on the proposed modifications on or before September 5, 2021, we ask that you consider this request on an urgent basis.

Respectfully,

Barbara Markovits, Chair Eastern Shore Forest Watch Association

and

Atlantic Salmon Federation St. Andrews, New Brunswick

Atlantic Salmon Federation



East Coast Environmental Law Halifax, Nova Scotia

Ecology Action Centre Halifax, Nova Scotia

Nature Nova Scotia Halifax, Nova Scotia

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