SAVE-THE-CEDAR LEAGUE

8995 Loos Road, Crescent Spur, British Columbia, Canada, VOJ 3E0
Tel/Fax: (250) 553-2325; Email: STCedarL@aol.com

www.SaveTheCedarLeague.Org

A Registered Charity, Incorporated in 1992, Concerned With: Conservation, Education, & Ecotourism of the Wildlife, Fish, Waters, Wilderness, Biodiversity, & Ecosystems of Old-Growth Cedar Rainforests

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30 June 2009

Ms. Darlene Clark Integrated Land Management Bureau #200-1488 4th Avenue Prince George, BC V2L 4Y2

Re: Morkill River Independent Power Plant Proposal, File Nos. 7408964 and 7408965

Emailed To: Darlene.Clark@gov.bc.ca

Dear Ms Clark:

This is Save-The-Cedar League's (STCL) submission to Front Counter's call for input on Robson Valley Power Corporation's (RVPC) Morkill Expansion Project. We are a science-based conservation organization that has studied the Morkill watershed and participated in ALL Robson Valley land use processes for 22 years. We have published several peer-reviewed articles and a book that contain information on the Morkill Falls and Morkill watershed.

STCL finds that RVPC's Morkill Management Plan document is riddled with exaggerations, missing information, self-serving statements, and falsities that

leave us extremely concerned about their proposal.

RVPC's Morkill Management Plan proposes destruction of Morkill Falls, destruction of salmon, blue-listed bull trout, and other fish habitat, destruction of sustainable ecotourism economies and opportunities, local extermination of endangered mountain caribou, at-risk grizzly bear and several other listed species. It also proposes destruction of a globally unique Rainforest wilderness and its rare biodiversity.

The RVPC proposal also proposes severe degradation of the globally unique Walker Rainforest Wilderness, the largest wilderness (2006 sq. km; 774 sq. mi) remaining anywhere in the world outside of parks that contains ancient rainforest and viable populations of seven premiere focal species of conservation biology. The Morkill waterfalls and watershed is the heart of all the above values that will be forever destroyed if Front Counter/ILMB allows this ecologically devastating proposal to go forward.

STCL's SPECIFIC CONCERNS

1. Fish Habitat and De-watering of the Morkill Riverbed

RVPC's Statement c; Identified Concerns page 2: "It is our desire to use <u>all of the stream flow available</u>...during...winter...."

STCL NOTICES

RVPC's plans are to dry up the Morkill Falls and riverbed beneath the falls. This will destroy critical spawning and rearing habitat for Chinook salmon, blue-listed bull trout, and a high biodiversity of many other fish species that all depend upon that stretch of river for rearing of young fish in nests at the exact time RVPC plans to de-water the riverbed. The proposal will also destroy fish habitat for many fish species downstream for several kilometres since normal water flow and normal fish habitat will not immediately occur when re-watering is forced out of RVPC's pipe.

The Wildlife Conservation Society and STCL documented that Robson Valley is the last place left throughout the Rocky Mountains where grizzly bears are known to still feed on ocean going salmon (Grizzly Bears and Chinook Salmon in the Inland Rainforest 2004, by John Weaver and Rick Zammuto, 14 pages). The magnificent Morkill Falls raceway starting at the base of the falls and flowing for over a kilometre is the exact location where this world-class salmon-grizzly phenomenon occurs. The salmon-grizzly phenomenon is observed by many tourists in sustainable ecotourism businesses. De-watering this portion of the Morkill River will destroy all the nests of eggs and hatching fish that were left by Chinook Salmon each previous fall and will destroy critical spawning and rearing habitat for blue-listed bull trout and many other fish species.

The salmon-grizzly relationship alone makes the Morkill Falls one the most important tourism sites in the entire region.

2. RVPC's Statements pages 3-4; Ungulate Winter Range:

"A large portion of the project is located within designated "Ungulate Winter Range. We have studied this subject extensively and have found that Caribou actually winter...nowhere near the proposed project."

STCL NOTICES

The area of the RVPC power plant and much of the power line has been designated "ungulate range" by government biologists, many scientists, and many members of the public during many public review processes in which STCL participated, where it was determined that the Morkill watershed is critical to ungulates for their survival after many years of research and study. Mr. Blagborne claims he is more knowledgeable than government, biologists, and the public who provided real data to designate the area as ungulate range in these processes. Scientists know that the Morkill Watershed is the only watershed in Canada where three federally-provincially recognized endangered or threatened woodland caribou subpopulations have their last stronghold. The Caribou depend on the unique habitat proposed to be cut down for the 50 km of power lines in the RVPC Management Plan. Instead, the Management Plan falsely claims that no caribou were present for 15 years, opposing much scientific data to the contrary, too voluminous to post here.

The RVPC proposes to use their false "data" to log legislated, endangered Mountain Caribou Reserves and to make permanent roads within 2 km of others where it is illegal to make permanent roads under FRPA. Additionally, several Spatial Old Growth Management Areas designed to protect caribou, ungulate range, tourism values, and the world's only Inland Temperate Rainforest that are also legislated for no logging or roads are not mentioned anywhere in the RVPC Management Plan, yet are planned for obliteration by the proponent's power plant, power lines, and accompanying road development.

3. RVPC's statements pages 3-4; Ungulate Winter Range:

"The risk to Caribou survival is human activity (primarily snowmobilers) giving predators easy access to run down animals on top of the snow. This is a public access issue and RVPC is willing to be part of the solution".

STCL'S RESPONSE

RVPC will be the cause of the exact public access problem they propose to fix by providing new access to snowmobiles. RVPC will further drive the endangered caribou towards extinction by PROVIDING the very access RVPC claims they are "willing to be part of the solution." Scientists know that the Morkill watershed is the last stand for three federally-provincially recognised endangered or threatened woodland caribou sub-populations—the only such watershed in all of Canada.

RVPC's 50 kilometres of power lines will create the exact conditions for which snowmobilers are looking. Prince George MOF Regional Ecologist Dr. Dale Seip, MOE Biologist Glen Watts, and UNBC Professor Dr. Chris Johnson documented the negative impact of snowmobiles on this endangered species in their report: Displacement of Mountain Caribou from Winter Habitat by Snowmobiles 2006, 21 pages. Their findings prove that the RVPC will cause local extinction of the Morkill Caribou by providing snowmobilers new access to critical Caribou range. Caribou run from snowmobiles and stay away for weeks after they are disturbed, causing them severe energy problems in winter that leads to their death. The RVPC plan claims to be part of a solution when in fact they will only be the exact cause of this problem.

The Triton environmental report in the RVPC Management Plan states that caribou use the Morkill watershed as summer habitat, and the report acknowledges that the valley bottom of the Morkill Valley is a cross-valley travel corridor for mountain caribou in winter. Curiously, Triton then contradictorily refers to ecologist Dr. Dale Seip's 2004 study completely out of context: "No evidence of use by caribou was noted in the Morkill River watershed" (Page 59). Dr. Seip's statement does not apply to the discussion in the Triton report.

The ILMB's own website on Resource Management Zone D for the Robson Valley LRMP regarding endangered and at-risk species is: "This RMZ is used year-around by a local population of mountain caribou and is frequented in the summer months by the woodland caribou from the east slopes of the Rocky Mountains. The majority of the forested area in this resource zone is rated high for grizzly habitat ..." This fact is completely omitted from the RVPC proposal.

RVPC's transmission lines will stretch for 50 kilometres. Any logging through endangered caribou habitat will destroy the habitat for use by caribou and send the species closer to extinction. Blue-listed grizzly bears will also be severely impacted by the RVPC. Studies have found and the ILMB website publishes that grizzly bears make more use of the mid-elevation forest in the Morkill Valley than elsewhere in the Robson

Valley.

STCL's scientists find Triton's report contains much double talk documented in the contradictory statements above and we insist to Front Counter/ILMB that the Triton Report is scientifically flawed in several other locations. The potential ecological impacts of this proposed project must be examined by independent scientists, not those being paid by RVPC.

STCL'S GENERAL RESPONSE TO RVPC'S DISCUSSION OF THEIR PROPOSED ROAD CONSTRUCTION

RVPC states they will build their power line along the existing Morkill Forest Service Road (FSR), whereas we find this is impossible. There were numerous problems and space was severely limited between the Morkill River and the steep slopes running along the river when the Morkill FSR was constructed. The result was that much of the road was constructed within a critical riparian zone that today would be illegal under FRPA. We thus find that RVPC will have to construct much of their power line through legally protected forested lands, away from the Morkill FSR because there is no room to put power lines along the Morkill FSR.

However, the RVPC Morkill Management Plan proposal ignores legislation, since the RVPC plans to log off legislated Spatial Old Growth Management Areas and to make permanent roads inside and within 2km of Endangered Mountain Caribou Reserves, all illegal activities under FRPA.

4. RVPC's statements page 3 d; Access Roads, Power House, Penstock, and Tailrace:

"Access to the powerhouse area will require a road to be built from Morkill Forest Service Road, 1200 meters to the Power House location. The road would be mostly hewn out of solid rock..."

STCL'S RESPONSE

Mr. Blagborne falsely downplays the amount of logging required to carry out his proposal in his quote above and throughout his application. Page 15 of RVPC's Morkill Management Plan proposal shows the powerhouse location. No matter how the proposed powerhouse location is accessed from the Morkill FSR, the route will go through solid, undisturbed forest, and much of it is legislated for no logging under FRPA as Spatial Old Growth Management Areas.

STCL spent more than two decades attending ALL government-planning processes in Robson Valley. The Morkill Falls was identified as having exceptional values at these processes and ALL Robson Valley stakeholders agreed there must be no logging in the falls area. The Morkill Falls was designated an official Special Site Recreation Area Map Notation in the Robson Valley LRMP Process by all stakeholders because of the high recreation, tourism, and public values and this fact has been published on ILMB's (MSRM) website for almost 10 years. RVPC wants Front Counter/ILMB to throw away results obtained from the decades of hard work by those stakeholders who heavily invested their time, energy, and resources.

5. RVPC's statements Page 7 Issues Governing Design Power Line, a; design concept:

"RVPC intends to construct a standard, 52 kilometer...power line...The route chosen is intended to cause a minimum of disturbance during construction or maintenance and therefore runs along existing forest roads."

STCL'S RESPONSE

During construction of the existing Morkill FSR many problems were encountered because of the narrowness of available land existing to put a road between the Morkill River and steep slopes. There is no question that RVPC will have to extensively log along their proposed power lines to erect poles. Please see OUR GENERAL RESPONSE TO RVPC'S DISCUSSION OF THEIR PROPOSED ROAD CONSTRUCTION above.

6. RVPC's statements page 8 d; Aquatic Impacts:

"Minimal; Will be included with fisheries reports."

STCL'S RESPONSE

The fisheries report in the RVPC Morkill Management Plan proposal does not address this issue, contrary to the RVPC statement above.

7. RVPC's statements page 8 e. Fish and Wildlife Habitat Impact:

"Included on Biologist Report."

STCL'S RESPONSE

The few hours Triton spent in the Morkill watershed was not enough time whatsoever to accurately comment on this RVPC major construction job. These are some of the published Fish and Wildlife Habitat Impact facts completely missing from the Triton Report:

- A Conservation Area Design shows the Morkill River valley is one of the two most valuable wildlife
 areas in the Interior of southeastern BC outside of parks, having enough core habitat to maintain
 viable populations of six large mammal species: lynx, grizzly bear, cougar, wolf, wolverine, and
 caribou (published 2005). RVPC's proposed activities put the largest remaining populations of these
 species in southeastern BC outside of parks at risk of disappearing, yet the study appears nowhere
 in the RVPC proposal.
- Triton makes no comment on the Walker Rainforest Wilderness (WRW) of which the Morkill Falls and River are its heart. At 2006 sq. km (774 sq. mi) the Walker Rainforest Wilderness is the largest wilderness remaining anywhere in the world outside of Parks that includes Ancient Inland Rainforest, Mountain Caribou, Salmon-Grizzly, and ocean-going Chinook Salmon, all dependant upon the critically significant Morkill watershed (published 2007).
- The Morkill watershed contains the only watershed in Canada that is home to three federally-provincially recognized sub-populations of at-risk woodland caribou (the Southern Mountain, Northern, and Alberta Mountain ecotypes) (published 2005, 2006, 2007).
- Triton makes no comment on the fact that the WRW is the largest remaining undeveloped watershed-cluster in the entire Rocky Mountains where Grizzly Bears can still be watched fishing for wild, ocean-going salmon (published 2002, 2007). DNA analysis showed these blue-listed "Salmon-Grizzly" depend upon Chinook salmon for 20% of their diet in the WRW (published 2004). The Morkill Falls is the largest waterfall with the largest Chinook salmon raceway in the region. Salmon-Grizzly feed on spawning salmon among the large boulders strewn along the magnificent raceway beneath the falls (published 2007).

Thus, RVPC's proposal will inflict a severe survival hardship upon endangered caribou and at-risk grizzly bears should Front Counter/ILMB allow the application to proceed and yet none of these published facts are mentioned in the biologist's report.

STCL feels we all have a duty to maintain outstanding, rare wild places of high biodiversity like Walker Rainforest Wilderness, Morkill Falls, and the Morkill Watershed, leaving to future generations a world enriched by our stewardship. Our opportunity for their conservation should not be squandered by RVPC's proposed unsustainable development based on exaggerations, missing information, self-serving statements, and falsities.

8. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 54

"This brief report was prepared to document the findings of the one-day field investigation..."

STCL'S RESPONSE

One day is insufficient to make accurate comments on this major construction project.

9. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 54

"Spawning habitat was difficult to assess as the river is quite turbid, but extensive gravel bars were not noted."

STCL'S RESPONSE

Extensive gravel bars are not needed for spawning habitat as STCL's 22 years of observing spawning beneath the falls attest.

10. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 54

"The river margin was sampled...but no fish were captured in 285 seconds of electro fishing."

STCL'S RESPONSE

Trying to find fish for less than 5 minutes is insufficient to assess fish use affected by this major development. The backed up water will extend for several kilometres up river—5 minutes and old reports do not prove there are no fish.

11. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 55

"Historically, Chinook salmon have been recorded spawning up to the base of the falls. However, these sources don't indicate if Chinook spawning was actually observed at the falls, Chinook salmon were observed at the falls, or if the falls are at the upper limit of Chinook access within the system."

STCL'S RESPONSE

Triton has no sources of information yet tries to pretend it has done some research talking to people. Many scientists, local residents, recreationists, and others have all observed Chinook salmon and blue-listed bull trout spawning and rearing at the base of the falls for more than 20 years and told RVPC these facts. STCL scientists contend Triton has done an inadequate study and this fact is proven by a simple Google Internet search that indicates all the following facts that were completely left out of the Triton Report:

• The latest ILMB (MSRM) documentation on this subject from Thibeault, Nesbit, and Spears 2006, Robson Valley-North (former Robson Valley Forest District) Sustainable Resource Management Plan Biodiversity Chapter Background Report, 46 pages is: "The Morkill River system is highly rated for fisheries values. Chinook salmon and fresh water fish species are present in the main Morkill River

up to a barrier at Morkill Falls. The river above the Morkill Falls contributes to ensuring stream temperatures and food sources are favourable for the downstream fisheries..." (page 33).

- This was published in 2007: "Scientists documented the (Morkill and Walker) areas' critical importance so convincingly that the BC Government legally protected 529 sq. km of Mountain Caribou Reserves and 163 sq. km of Spatial Old Growth Management Areas within the area during 2003–2006 (Carson et al. 2003, Stevenson et al. 2003, Thibeault et al. 2006)."
- This was published in the Watershed Sentinel Journal Vol. 12 Number 5 in 2002: "Morkill Falls, with the highest water volume for waterfalls in the region. Salmon and bull trout spawn and grizzly feed on the 1 square kilometre race way below three large falls...A bottleneck wildlife corridor, used annually for migration by many large mammals, with up to 1500 spawning Chinook salmon, and prime bull trout streams, are found on the Morkill..."
- This was also published in 2002: "The following watersheds (have) hundreds of salmon and bull trout spawning grounds...Morkill..."
- This was also published in 2002: (Morkill Falls has) "...the highest water volume for a waterfall in the region...Grizzly feed on spawning salmon among the large boulders strewn along the magnificent raceway beneath these...falls."
- This was published in 1997: Morkill Falls is "The most impressive waterfalls of the Robson Valley."
- This was published in 1996: The "Morkill...contains the caribou calving grounds for caribou from Willmore Wilderness Park in Alberta."

Clearly, from the above-published quotes on the Internet, Triton and RVPC have done an inadequate study and have not talked to any of the right people, yet try to make sweeping biological conclusions based on a complete lack of information about fish, caribou, grizzly bears, and other subjects (see below). STCL scientists contend that the Triton fisheries report and the RVPC Management Plan's discussion of fish, grizzly bears, caribou, and other species are severely incomplete and scientifically biased. The RVPC conclusions consistently say what RVPC wants Front Counter/ILMB to hear, without using any detailed study, so that RVPC can dry up the Morkill riverbed and illegally log endangered species habitat and spatial old-growth management areas without proper scrutiny.

12. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 55

"Fish sampling was conducted downstream of the falls on Sept 3rd, 2008".

STCL'S RESPONSE

One day in the field is insufficient to assess fish use affected by this major development.

13. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 55

"Rearing habitat quality was good, as large boulders and eddies provide abundant cover. The river has sufficient depth to provide over wintering habitat in the vicinity, though higher quality over wintering habitat is available at other locations downstream (e.g., at the confluence of Forget-me-not Creek)."

STCL'S RESPONSE

Forget-me-not Creek is 3 kilometres downstream from Morkill Falls. We see Triton is double-talking on the one hand finding conditions suitable for fish rearing at the Morkill Falls, while on the other hand downplaying that suitability by saying there is better fish rearing habitat downstream, all with NO EVIDENCE. There is not a word in the Triton biological report of what will happen downstream when water

gushes out of RVPC's pipe. However, STCL's scientists know that much of the riverbed will be de-watered for several kilometres downstream; destroying fish habitat exactly where the Triton report found salmon and states this habitat is good for many fish species.

14. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 55

"Spawning habitat was difficult to access due to the turbid water conditions, but is not SUSPECTED to be of high quality...Because spawning habitat is LIKELY of poor quality, Chinook spawning is not SUSPECTED to occur within the reach immediately downstream of the falls."

STCL'S RESPONSE

Triton's findings are not scientifically valid. Innuendos from someone coming from hundreds of kilometres away, spending only 20 minutes electro shocking downstream of the Morkill Falls and only 5 minutes above the falls, and being paid by the proponent is absolutely no substitute for a thorough scientific study to find out the facts. This report has little facts and uses mostly innuendo to tell Front Counter/ILMB what RVPC wants government to hear. STCL'S scientists see the Triton report flagrantly scientifically biased to satisfy RVPC and Front Counter/ILMB.

15. TRITON ENVIRONMENTAL CONSULTANTS REPORT pages 55-56

"Additional fish sampling was conducted along the right margin of the Morkill River immediately upstream of the confluence of Forgetmenot Creek."

STCL'S RESPONSE

Triton's focus on the confluence of the Morkill River and Forget-me-not Creek speaks very loudly of RVPC's need to convince everyone that the quality of fish habitat from Forget-me-not Creek upstream to the base of the Morkill Falls is very poor, and Chinook salmon do not spawn, use, or have any need for this portion of the Morkill River. RVPC needs to convince everyone of this because RVPC needs to carry out their destructive industrial activities in this portion of the Morkill River. We see the Triton report flagrantly biased to falsely satisfy RVPC and Front Counter/ILMB, whereas we have watched salmon and bull trout spawning beneath Morkill Falls for 22 years.

16. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 55-56

page 55: "Spawning habitat was difficult to assess due to the turbid water conditions, but is not suspected to be of high quality".

page 56: "A more in-depth study of the habitat in the vicinity of the falls would be required to more conclusively demonstrate the poor quality of the spawning habitat at this location...Consideration may need to be given to a Chinook smolt outmigration study...As with chinook salmon, the quality of the below the falls appears to be of marginal quality for spawning, however bull trout are able to use smaller patches of gravels. The habitats below the falls were judged to have good rearing habitat quality for bull trout".

STCL'S RESPONSE

Triton asks for more in-depth study because they know their study is insufficient, yet they still try to say spawning habitat is poor. Triton uses the words "suspected," "appears," and "judged" because their assessment is insufficient. Triton tries to make spawning habitat more important than rearing habitat but our scientists know both habitats are critical to fish. Triton's insufficient study even found rearing habitat of a blue-listed species beneath the falls planned to be dried up by RVPC, and therefore the question about

spawning habitat is much less relevant than Triton is trying to make it. We thus see the Triton report flagrantly biased to satisfy RVPC and Front Counter/ILMB that salmon do not spawn in the location planned for de-watering. However, the rest of the Triton data demonstrate that rearing habitat will definitely be destroyed beneath the falls and for several kilometres downstream by RVPC and our scientists know rearing habitat is just as important as spawning habitat.

17. TRITON ENVIRONMENTAL CONSULTANTS REPORT page 59

"Morkill Falls are in a recreation reserve and permission to develop within the reserve would need to be obtained from the appropriate agencies...Identification of fish habitat quality and spawner use, and permission to operate within the recreation reserve are likely to be the most significant obstacles to permit this project."

STCL'S RESPONSE

These are significant obstacles but all of STCL's responses above demonstrate Triton is mistaken to claim they are the only significant obstacles.

18. TRITON ENVIRONMENTAL CONSULTANTS REPORT Page 59 Neil Foord, B.Sc., R.P.Bio.

STCL'S RESPONSE-A few hours of field study by a B.Sc. to evaluate the feasibility of this major construction job is unacceptable. STCL's and other scientists with Ph.D.'s have published many, many facts opposite to Triton's report and opposite to other text of the RVPC Morkill Management Plan over the last 22 years.

STCL'S GENERAL RESPONSE TO THE MISSING DATA WITHIN RVPC'S PROPOSAL

Most of the development RVPC proposes would occur within wet Interior Cedar-Hemlock (ICHwk3) forest, according to the RVPC's own consultant Triton. This entire area was recommended for a moratorium from further logging for 10 years by government's Forest Practices Board in 2008, yet this fact is completely excluded from the RVPC application.

The Triton report acknowledges, "One red-listed ecosystem...and three blue-listed ecosystems were noted..." by the Conservation Data (page 58). Yet Triton also irresponsibly claims, in their Conclusions on the next page that "environmental assessments...are not expected to indicate the presence of any rare species or ecosystems at the site" without ANY data. STCL scientists see this as a severe contradiction biased to falsely satisfy Front Counter/ILMB.

STCL NOTIFIES FRONT COUNTER/ILMB

We were one of the many stakeholders that helped identify the high biodiversity and exceptional recreation sites of the Morkill watershed in many government-planning processes (LRMP, LRUP, Caribou Habitat, Old Growth Management Areas, sustainable alternative economic activity processes, etc.), over the last 22 years. Our scientists were contracted by MOE to provide wildlife and fisheries data and reports, and we worked with staff from ILMB (MSRM), MOE, and several Assistant Deputy Ministers on the Morkill watershed's Spatial Old Growth Management Areas, ungulate range, and endangered Mountain Caribou Reserves. Morkill Falls is officially designated as a Special Feature Recreation Map Reserve in the Robson Valley LRMP because of its high tourism and recreational value. We note that an Order in Council by

Cabinet recommended by the Provincial Ombudsmen due to our formal deliberations deemed 20 kilometres of the RVPC proposed power lines off-limits to further development. We note that there are many areas planned for logging and road building by RVPC where logging is illegal. Thus, we deem RVPC's proposed activities as illegal because they violate several legislated land use designations and we urge that Front Counter/ILMB disapprove the application.

Sincerely,

Julie Zammuto

Julie Zammuto, Secretary/Treasurer