

**STRATHCONA PARK PUBLIC ADVISORY COMMITTEE  
(FINAL MINUTES FOR July 13, 2012– Rathrevor Park, Parksville)**

**SPPAC MEMBERS:** Tawney Lem (Chair), David Campbell, Peggy Carswell, Nick Page, Allison Mewett, Hardolph Wasteneys

**Ministry of Energy, Mines and Petroleum Resources:** Anne Moody

**BC Parks:** Andy Smith

**Recorder:** John Milne

**Public:** Karl Stevenson, Peter Rothermel

**Absent:** Phillip Stone, Erik Holbek, Barb Baker has left SPPAC

**1. Opening Remarks Tawney Lem**

Barb Baker has resigned from SPPAC. Tawney thanked her for the time she served on the committee. Andy will arrange to present a gift of appreciation for her work.

Introductions of everyone in the room were made.

The previous meeting's minutes were approved via email in a more timely manner. They need to be posted on B.C. Parks' website.

Nick noted several members have served for 5 years and the maximum term is 7. Therefore, there will be a larger turnover of members in 2 years. Tawney and Andy will review the areas of expertise listed in the Committee Terms of Reference selection criteria to recruit a replacement for Barb.

**2. Guest: Anne Moody, Senior Reclamation Scientist, Ministry. of Energy, Mines and Petroleum Resources All**

Anne has been involved with the Myra Falls mine site since the days of the power line application. She is now fills a "reclamation" position. She received SPPAC's questions some time ago, but due to a heavy work load she hasn't prepared a formal presentation. Her specialty is plant ecology. Her background is not in government, rather as an environmental consultant.

SPPAC sent her a list of questions regarding the mine. The answers to each one follow.

Question 1: How does the proposed reclamation standard for the Myra Falls site differ from other mines in BC given that its future use will be a provincial park? Is it held to a higher standard?

There is no overall standard for mines in BC. All plans are dealt with on a case by case basis as each is a unique circumstance with different environments. The goal is to have the landscape returned to as close to its natural state as possible. The mine being within a park makes no difference to the standards of reclamation used. Growing vegetation on a mine site is challenging. The aim is more ecological restoration rather than pursuing not commercial forest type restoration. Nyrstar will try to shape the landscape to make it look natural with some diversity. Anne believes this approach fits with the park's objectives.

Nick asked if restoration that has already been done has been successful. The answer - – at this time in the mine's cycle, reclamation has been a low priority and as well, there has not been a lot of monitoring of the restoration efforts to date.. This is improving now. Alders have been planted which is a good start, however, organics have not been added as a soil amendment. Nyrstar has questions about what is allowed since the mine is in a park. The mine is being encouraged to evaluate what they've done to see what is successful. Some native species are colonizing naturally on site.

Peggy asked about using wood chips as organic supplement. This is a possibility and is being used at other mines. Use of woody material is encouraged but care must be taken to avoid smothering young plants. There is currently no plan at the mine regarding the use of organics, primarily focusing on plantings and natural re-vegetation on clean-fill soils. There are engineering considerations as well. Trees will be growing on tailings eventually but the use of fertilizer is being encouraged to increase success. The mine is waiting for positive feedback allowing them to do so in the Park. Andy commented that while he will confirm this, in all likelihood, some form of fertilization would be allowed. It would be better for NVI though discussions with MEM and consultants to propose type, quantity and scheduling of fertilization and then BC Parks can review and approve if appropriate. Peggy suggested using large compost tea production. There is a concern about the odor attracting bears. Peggy will send information to Anne on this. Material would have to be brought from off site which could be a problem in a park due to the introduction of non native species. However, "off site" could also mean elsewhere in the park. This may be suitable for some areas and not others. Foliar feeding may be better.

Nick asked about how Anne's interactions with Nyrstar have been. Anne has encouraged better reclamation efforts. Nyrstar has hired a consultant, and needs to better monitor their reclamation results.

SPPAC thought it would be useful for Parks to let Anne and Nyrstar know what natural materials could be used to add organic material to the soil and what can and can't be moved into the Park. Andy said there are many variables so this too would have to be done on a case by case basis. Andy said that the mine should make a proposal for the use of soil amendments and Parks would make a decision accordingly.

Hardolph noted there is a lot of woody debris in the form of slash, available just outside the park and elsewhere inside the Park. Stumps along the shore of Buttle Lake may be useful. Some stumps are left for fish habitat, and some are removed for navigational safety.

Acid mine drainage from mine waste means waste must be capped and water encouraged to flow over the surface as much as possible instead of percolating into the ground. Drainage must be kept away from tailings so ground water doesn't pick up the acids. Drainage is diverted around the tailings as much as possible. Tailings are fine and are impermeable so water doesn't flow through them. Waste rock is more porous and water moves through it more easily. Drains are used to intercept waste water so it can be treated.

While water samples of Myra creek meet current standards there is some indication that water with higher mineral content is bypassing the drainage system and entering the creek prior to being treated. Monitoring will always be needed.

Question 2: What process or issue resulted in the substantial recent increase in bond requirements for the Myra Falls operation? What this based on new information about risk? How are bonding requirements calculated?

Bonding is related to closing and reclaiming the mine site and ensuring long term water quality protection. The Ministry of Mines estimates what it would cost if the mine defaulted on its reclamation plan. The increase in the bond is due to an increase in costs and awareness of what is realistic regarding the cost of reclamation. A review showed the site would cost more to reclaim than previously thought. This is consistent with mines across the province. Also, a new water treatment plant is now included in the cost of reclamation. This water treatment will be needed indefinitely. Bonding needs to cover this. Costs are based on what it would cost to hire a third party to do the reclamation. It is cheaper if the mine does the reclamation themselves. The reclamation plan will be reviewed at some time in the future, probably in 5 years, but this is not certain. The mine's bond has been increased from \$38.3 million to \$70.6 million to be secured by 2015. The bond is deposited in a bank and collects interest for the company. After reclamation is complete any unused funds would be returned to the company. The company nor the government can touch this bond money, unless the company defaults. Details of the new water treatment plant are unknown at this time. Andy will ask Ivor McWilliams for more detail about this. Also, Anne will try to learn more about the future plans and let Andy know. Bonding is thought to be sufficient to cover long term reclamation, monitoring and treatment of waste water if needed. Anne noted as mineral prices rise and technology improves, it may become more economically feasible to process some old waste rock or pursue less desirable places than today. This could conceivably extend the life of the mine.

Andy asked what is the long term process if something goes wrong? While bonding should always be in place, who would be responsible for monitoring or implementing projects if the company goes out of business? Ann indicated that if the company is sold, obligations for reclamation are taken on by the new company..

Mines website has documents on it regarding reclamation processes and policies. Look at: <http://www.empr.gov.bc.ca/Mining/Permitting-Reclamation/Costing-Security/Pages/default.aspx>

The Ministry of Energy and Mines would take over responsibility if there is a problem. The new Park Use Permits expire in 2032, so Nyrstar would need another permit after that to carry on. In 1969 there was a new mines act, so any pre-existing mine is not covered by current regulations. Many mine permits in the province are still active because there are still issues to be concerned about even though the mine may be shut down.

Of interest, some abandoned mines have become good bat habitat which must be considered if the mine is reopened.

Anne is willing to follow up on any questions emailed to her.

Question 3: Do the metal concentrations in site run-off meet current industry standards? Or are acceptable levels of run-off based on older standards from permits signed in the past?

This question should go to the Ministry of Environment.

Question 4: How frequently and to what extent is the mine currently inspected and reviewed given reduced staff levels in the Ministry?

There are various kinds of inspections carried out. In the last 3 years there have been 20 formal inspections plus other informal inspections and discussions. Ministry staff are overworked, but are keeping up with the required inspections. If an inspector making one kind of inspection sees something of concern, he will notify the relevant inspector to have a look. Sometimes private contractors are used to alleviate the workload by carrying out some of these inspections.

Question 5: How can SPPAC best assist in reviewing or commenting on the closure plan?

SPPAC's comments are welcomed by the Ministry of Mines. There will always be people at the site, as there will be a need for constant monitoring of waste treatment. Anything of concern should be reported to Ministry staff.

The main/overall closure plan is to be done in about 3 years. There is also a TDF Closure (Tailings Disposal Facility) plan that is being reviewed now. The big issue is that the mine is running out of space to put waste material and this may be the limiting factor that could eventually force the mine to close before the ore is exhausted.

The overall Closure Plan includes a reclamation component. Reclamation has already been done where possible.

Anytime the mine wants to change anything, the permit must be changed, and the Ministry has power to influence what happens. Plans are fluid as situations change, but always the main intent of the plan must be followed. When the closing of the mine is imminent, the reclamation plan gets more detailed.

Karl asked when the mine closes, will they relinquish their claims? The answer is they still hold the rights, but would have to reapply and work out new conditions and new assessment processes. They may or may not receive permission to reopen. The mine can't relinquish their claim because they retain the obligation to restore the site. If the Myra Falls site returns to class A status, a reopening of the mine would not be possible.

What happens to the dammed lakes supplying power to the mine? This is under the control of the Provincial Water Controller. Anne doesn't know what will happen to the dams. Andy says this is part of the closure plan. Andy hopes these lakes can be reclaimed too. Power to run the pumps could come from some other facility, i.e. diesel or new technology, not necessary infrastructure at Jim Mitchell or Tennant Lakes.

If Strathcona Westmin Park is returned to class A park, does Nyrstar have to be compensated for lost opportunities? The answer is no.

**a) Closure Plan Review for Tailings Disposal Facility**

**Hardolph**

The Mine Development Review Committee meeting with Nyrstar was held on June 12, Andy and Hardolph attended on behalf of SPPAC. Hardolph showed SPPAC the map of the tailings dam area and explained the plan. Money has already been spent on seismic upgrades at the mine site, specifically at the berm designed to prevent the tailings slumping in a big earthquake. The hydrographic geology of the mine area was also displayed. Old waste rock is covered by newer material. This exposed old waste is now thought to be what was the source of acid generating run-off which caused problems in the 1980's, rather than the tailings dumped in the lake. The waste rock must be covered so water does not get to it causing oxidation and release of acid drainage. Some of the experts disagree on the level of effectiveness of various covering options, dependant on

how the material interacts with air and water. The berm around the perimeter of the TDF is made of clean fill and holds back unstable material deposited behind it. This unstable material is semi-wet. The cover system is one to two metres thick over top of everything else and may also, in some places include a non permeable synthetic cover. There are several different synthetic cover systems available and all have been reviewed and considered. Interceptor drains under the berm gathers water which has percolated through the waste rock. One of these drains, the outer drain, is lower than Myra Creek so there is an inflow of fresh water into the potentially contaminated water resulting in the mine having to treat a higher volume of water. There is also a problem with potentially contaminated water flowing under the whole valley and working its way into Myra Creek. Hardolph believes it may be possible to use injection wells to force the contaminated water back so it can be collected in the drains, however, as Myra Creek water quality is currently meeting all environmental standards, the high cost of such improvements, if in fact possible, is questionable for the capture of such a small amounts of contaminated water.

Water has to be kept from running down the slope and either around or across the surface of TDF site so it doesn't erode contaminated material.

Interceptor drains have evolved over the years as the pile of waste has accumulated. The life span of this situation is an issue, and the facilities and water will have to be maintained and monitored 24/7 with about 3 employees on site at all times.

The current treatment system is removing approximately 75%-80% of the zinc contamination, however, it must be noted that dissolved zinc was entering the water naturally prior to the mine site.

**b) CRAB" Area Clean Fill Borrow Application**

**All**

"CRAB" stands for "Core Rack Area Borrow"

Clean fill is being used to cover the outside berm of the old Tailing Disposal Facility (TDF) as a seismic upgrade to meet Dam Safety standards. As this is a safety issue, this work needs to be finished this year and therefore, while authorized as part of their mining permit, NVI still needed to submit plans to BC Parks and Ministry of Mines for approval to extract the clean fill from a moraine deposit located near the old core racks. This is to be done by first removing the trees, stripping and stockpiling the organic layers, removing the clean fill and then reclaiming site utilizing the stripped organics. NVI plans to split this work into 3 stages starting at the top section and reclaiming each section as soon as possible as they move downwards. Parks will sell the trees with funds submitted into the Park Enhancement Fund Account. BC Timber Sales will coordinate cut and sale and receive a small percentage to cover their costs. The Park Enhancement Fund proceeds could be used anywhere in the provincial park system and allocated by priority. While not all, some of this area has been impacted in the past by a fire in the 1960's. Any surplus woody debris may be transferred to the TDF to enhance reclamation on that site. The cleared area will be about 6 ha in size. There will be a buffer between it and the mine access road to screen visual impacts.

All funds received through timber sales are required to go into the Park Enhancement Fund, where it is made available to all parks on a priority basis. While this policy was questioned in order to secure more funds from Strathcona, it appears that this will ultimately happen. Should conservation or reclamation projects be identified for Strathcona, they can be submitted for consideration to access the PEF account. The total amount revenue generated will not be known until it is decked, scaled and the bid is awarded.

As a side comment, Hardolph believes the mine site should look into ways of being more attractive and inviting to the public to pass through.

A discussion ensued about what the area will ultimately look like after reclamation.

**Recommendation from SPPAC - That SPPAC write the Regional Manager asking that the available funds be directed into Strathcona Park, Class A.**

Peggy suggested getting matching grants to leverage this money. Andy said the Park Enhancement Fund is designed to attract funds and leverage others.

Conundrum - Can you have a mine permit in a class A Park? No. So how will Strathcona Westmin become a class A park upon closure of the mine as is stated in the Master Plan for Strathcona Westmin? Can most of Strathcona Westmin become class A and a bit still be B? The committee doesn't want a mine permit in a class A park.

There will be future requests for clean fill elsewhere in the Class B park which may even include the Thelwood Valley.

Hardolph has concerns over a potential slide in the old Lynx Pit area. This needs more research. Alison recommended contacting the Regional Director with SPPAC's concerns over the possibility of this.

**Action - Hardolph will write a letter expressing these concerns to Andy and he will forward this letter to the Regional Director.**

**c) Trees along powerhouse road Phil/Hardolph**

There are hazardous trees in the area along the road between the Upper Myra Falls trail and the parking lot. Do these trees need to be removed? Andy said a tree assessment was done by a certified assessor considering park policy as well as Worksafe B.C policies. Parks has ground truthed the assessment and has agreed with most recommendations. A few questionable trees will be re-assessed by another assessor for a second opinion prior to any falling or modification.

**d) Explosives buildings Phil**

Prior to the meeting, Phil circulated an email to committee members commenting on the hazard tree situation surrounding the explosive buildings. He questions whether the buildings could be moved away from the powerhouse road to another site on the mine facility. The intent was to reduce any potential hazard to the public, and to also improve the visitor experience while at the trailheads.

Andy clarified that the current location of the buildings was required by the Ministry of Mines which required an amendment to the original permit. Due to regulations surrounding the facilities, it is unlikely that the buildings could be moved.

**3. Parks Volunteer Policy All**

Minister Terry Lake sent the draft BC Parks Volunteer Strategy to SPPAC. There is now another round of questionnaires available on B.C. Parks' website. The issue of insurance was a common concern for many groups. Parks is working with the Risk Management Branch to be able to insure a whole group (must be formal/registered) rather than each individual. One group rep would sign on behalf of all group members thereby streamlining the process.

The overall strategy is in three parts. The first phase is to hire a coordinator for the volunteer program (this new position has been advertised), improve online communication, and update the volunteer program manual. The second phase addresses group liability coverage and looks at ways to identify and support volunteer programs, including volunteer recognition and training. The third phase is to consider broader volunteer initiatives such as park ambassadors, volunteer tourism and trail mapping. Parks wants to grow the program to encourage more groups to volunteer. Parks would transfer the organization of a project to a group. This recognizes the value of volunteers. Projects still have to be supervised by a park person, and projects must be approved. The goal is to simplify the volunteer process and bring it in line with internal priorities. Parks would like to work volunteer projects into its annual management planning cycle which could result in better access to funds. Volunteer groups need to do their planning early.

Meeting observers noted that user camping fees for volunteers should be waived. This also reduces liability. Andy noted private contractors collect fees, however, depending on the project, there may be mutual benefits and the contractor may choose to waive camping fees for the benefit of all.

#### **4. Heber Diversion Decommissioning update**

**Andy**

Andy sent out an email on this topic earlier. Andy is meeting with the contractor next week to discuss the work while on site. The removal of the penstock within the Park is being done with less disturbance than previously planned for, but the job will take longer.

Andy sent out the Strathcona Park update by email, and is appended to the end of these minutes.

#### **5. Public Question Period**

Peter Rothermel asked about adding tailings to waste rock to make it more stable. Hardolph explained the use of paste to make the waste more stable. The berm is designed to keep this waste in place.

A question was asked about the TimberWest trade on Mount Adrian, and about who got the value of the timber removed from the park. Was it part of the trade with the islands they owned? Andy was not sure, but believed the entire value was balanced through the land trade which was made.

**Next Regular Meeting: October 19, 2012**

**Strathcona Update for SPPAC  
July 13, 2012 (Rath Trevor Meeting)**

**Strathcona Staffing** – We have hired two new Rangers this season. Zsana Tulcsik (Senior Ranger) until end of October and Jeff Hoy (Ranger), until September 7<sup>th</sup>.

**1) NVI/Nyrstar**

- Core Rack Area Borrow site project (CRAB – Clean Fill) – NVI completed approved exploratory work in CRAB area in March confirming volume expectations. NVI then submitted site development and extraction plans in June. NVI presented proposal to Vancouver Island Mine Review Committee (VIMRC) on June 12 in Campbell River (Hardolph and Andy attended). While existing permits grant the right for this project, NVI still requires approval of specific work both from BC Parks and Ministry of Energy and Mines (MEM). The review of the project is being lead by MEM who has referred the plans to all permitting agencies as well as First Nations. BC Parks is currently reviewing plans and has also requested and received input from Hardolph (SPPAC). Due to bird nesting season (ends August 1<sup>st</sup>); Regional Director has requested a bird nesting survey to be completed prior to him making a final decision. NVI expects to submit final report by during week of July 16<sup>th</sup>. The clean fill is needed to complete the seismic upgrade to the outer berm of the closed TDF.
- Tailings Dam Facility Closure Plan – NVI and associated consultants also presented this plan to VIMRC at the June 12<sup>th</sup> meeting in Campbell River. The first part of closure is to complete the outer berm upgrade. There is some urgency in the start of this project as the berm upgrade will take several months and they need to complete it prior to the Fall and Winter storms starting. Due to potential safety concerns, MEM will impose a hefty penalty if the project is not completed this year. Once completed, full attention can then be applied to the reclamation and drainage control efforts. The complete TDF closure plan is currently being reviewed by all agencies. Hardolph, as the SPPAC, NVI representative has been given the plan for review and has provided comments to BC Parks.
- Permit Renewal – The Park Use Permit renewals (1 Class A Park [hydro-electric] and 1 Class B Park [main operations]) have now been finalized and all security (2 x \$150,000) and Certificates of Insurance have been received. The renewals will expire again May 31, 2032.
- Jim Mitchell Lake Spillway Project – while still wishing to proceed as soon as possible, the project planning and approval process has not advanced over the last several months due to NVI's focus on the completion of the Park Use Permits, preparation of TDF Closure Plan, and planning of new clean fill project. BC Parks does not have any major concerns, but requested some additional information on sourcing and moving of material to increase height of earthen dam (Dam Safety requested a 3 metre increase to meet "freeboard" requirements (distance from lake water surface to top of dam). We have been notified by Rescan Environmental, that they have now amended their original report to address this change and we will be in receipt of the report by end of next week. However, the project "may" get postponed until 2013, depending on resources, approval time and weather.

**2) Capital Projects**

Paradise Meadows Loop Trail Bridge Replacement – this project was identified last year when it was discovered that one of the 3 stringers had cracked and the abutments were needing replacement. A steel stringer bridge with wood railings and decking will be installed in August. Temporary closure around the bridge site will be necessary and therefore while the project is ongoing trail restrictions will be imposed. Capital budget for this year is \$100K. If there is any surplus from the bridge project it may get applied to one or two smaller projects on the plateau, i.e. Battleship Lake toilet replacement; boardwalk and small foot bridge repairs, etc.

- 3) **Heber Diversion Penstock Decommissioning**  
BC Hydro has awarded the contract for the decommissioning project and BC Parks will be meeting the contractor and BC Hydro reps on site July 18<sup>th</sup> to review plans. The work inside the park will start by end of July.
- 4) **Interpretive Signage for SPWC** – A copy of the interpretive sign installed at SPWC last summer has now been fabricated and installed on the railing below the original in order to allow those in wheelchairs and children to have the same viewing opportunity.
- 5) **Backcountry PFO** – Windy Park Operations will continue to provide services this year and next, before this operations permit is re-tendered for a new 10 year period.
- 6) **Mount Washington Local Area Plan** – No new update since March. BC Parks and Ministry of Environment staff were provided an opportunity to forward and discuss concerns over the future growth of this area. Park and water impacts were identified and a suggestion to the regional district to request an environmental and water use/impact plan for the area as part of the overall plan. A draft Local Plan was expected for review in Spring 2012 but we have not received it yet.
- 7) **Backcountry Update** – Most alpine and subalpine trails are still under snow. Paradise Meadows is now free of snow but the Helen Mackenzie loop trail is still covered. Bedwell Lakes trail is free of snow just below Baby Bedwell Lake where the campsite is just now starting to peek through. Elk River is clear of snow other than the avalanche chutes which are still iced over. Trail updates are done weekly on our websites from either personal observation or reports forwarded to us.  
  
Some facility damage has been uncovered but nothing major identified yet.
- 8) **Comox Glacier Access** – Timber West has imposed a 24/7 restriction on the Comox Lake logging road this year. Only those with an agreement with Timber West and/or emergency personnel will be allowed through. Comox District Mountaineering Club has signed an agreement and obtained insurance which allows them to schedule guided hiking trips. Timber West has become quite strict over the last several years due to vandalism and fires.