# **Reasons for Decision**

## In the Matter of

# Notice of Work (NoW) "1610123 - Golden" (the Application) on Sumas Mountain, BC dated March 1, 2017

March 23, 2018

## 1.0 Introduction

This is a summary of my considerations, rationale and decision-making regarding the Notice of Work (NoW) application under the *Mines Act* entitled "1610123 - Golden", (the Application), Mine Number 1610123201701, Tracking Number 100180879, dated March 1, 2017 and received by the BC Ministry of Energy and Mines (now known as MEMPR) on March 9, 2017. The applicant is a numbered company, 266531 BC Ltd (Applicant), and Mr. Howard Turner is the agent acting on behalf of the Applicant. For all intents and purposes, communication with the agent is deemed to have also been with the Applicant. The Application is for mining activities on Sumas Mountain that include the quarrying, crushing, screening and stockpiling of rock for landscape and decorative purposes.

# 2.0 Legislated Authority

Pursuant to s.10(1) of the *Mines Act*, R.S.B.C. 1996, before starting any work in, on, or about a mine, the owner, agent manager or any other person must hold a permit for that work issued by the chief inspector of mines, unless exempted in writing by the chief inspector.

The application for a permit must include a plan outlining the details of the proposed work and a program for the conservation of cultural heritage resources and for the protection and reclamation of the land, watercourses and cultural heritage resources affected by the mine, including the information, particulars and maps established by the regulations or the Health Safety and Reclamation Code for Mines in BC (Code).

Pursuant to Part 10.1.1 of the Code, the proposed mine plan and reclamation program filed with the inspector in compliance with section 10 (1) of the Mines Act, shall consist of the appropriate Notice of Work forms together with such other information as the inspector may require, for approval of placer mining, sand and gravel pits, rock quarries and industrial mineral quarries.

At the time of the Application and the decision, I had, and continue to have delegated authority as a senior inspector of mines (permitting) from the chief inspector under section 6 of the *Mines Act*. My considerations and rationale are limited to the authorization issued under the *Mines Act*.

I understand an application had been made to the Chief Gold Commissioner under the *Mineral Tenure Act* for an extension of the mining lease on which the Application for a quarry is made; however, my decision is separate and distinct from that application. I am aware other authorizations may be required under other legislation or by other governing bodies, other than the *Mines Act*.

# 3.0 Overview of the Application

## 3.1 Background

Mineral exploration permit MX-7-150 was issued to the Applicant (266531 BC Ltd) in March 2003 and subsequently amended in December 2008. The permit was for the extraction of 9,000 tonnes (T) of dimension stone/decorative rock (a mineral) over the area roughly coincident with the current Application. In 2011, 265531 BC Ltd applied for a *Land Act* tenure to obtain a licence to quarry for decorative stone, however that application (2410612) was subsequently withdrawn.

No physical disturbance of the ground was reported under MX-7-150 for the years 2009 – 2017. The Applicant filed a Notice of Work (NoW) application, dated March 1, 2017 for a quarry (Q) permit to allow for mining activities as summarized below. The Application consisted of the NoW form with the required maps, sections and a blast plan which included procedures for guarding, blast initiation, blast hole loading and fly rock control.

In September 2017, 265531 BC Ltd applied for a return of the reclamation bond under MX-7-150. The Annual Summaries of Exploration Activities submitted by the company for 2009 – 2017 indicated that no physical work had been conducted under the permit. The reclamation bond was returned to 265531 BC Ltd. and permit MX-7-150 was closed in September 2017.

## 3.2 Location, Access and Tenure

The Application is for mining activities on Crown land. The area of the proposed mining activity, as described in the Application and herein referred to as the Application Area, is on mineral tenure 1046251, situated near the top west side of Sumas Mountain (49.1165° N, 122.1540° W) in the lower Fraser Valley, east of the City of Abbottsford (Abbottsford), and approximately 65 km east of Vancouver, BC.

Mineral tenure 1046251, which includes the Application Area, is in the S'olh Téméxw, the asserted traditional territory of the Stó:lō First Nations, signatories to the Stó:lō Strategic Engagement Agreement, and within the asserted traditional territory of a number of other First Nations. Mineral tenure 1046251 is also in Electoral Area G of the Fraser Valley Regional District (FVRD), adjacent to and contiguous with Sumas Mountain Inter-Regional Park (SMIR Park) which is managed jointly by the FVRD and Metro Vancouver Regional District(MVRD).

Access to Application Area from Abbottsford is east on the Trans Canada Hwy then north on Whatcom Rd for less than 100m to North Parallel Rd, then easterly on North Parallel Rd to Sumas Mountain Rd., then northerly to Batt Rd, then southerly to Taggart Rd, then easterly along Sumas Mountain Forest Service Road to the higher elevations on the mountain. Sumas Mountain Forest Service Road is also used as the only public access road to SMIR Park.

The mining tenure on which the Application is made is Mining Lease (ML) 1046251, issued August 25, 2016 and covers 106.0 hectares (ha). The ML is owned 100% by 266531 BC Ltd. and overlaps the SMIR Park on the northeast side of the mineral tenure. The ML holder must not carry out exploration and development or produce minerals in a park, as per s. 22 of the Mineral Tenure Act.

# 3.3 Proposed Mining Activity

The Applicant has applied for a quarry (Q) permit under the *Mines Act* to allow for the extraction of industrial mineral (decorative landscape rock). Key activities, aspects and scheduling of the mining activities proposed in the Application include:

- Quarrying: drilling (6" bore dia.), blasting, excavation, (Excavator Cat-349E, 4 cubic yard and 980K Cat Loader 7.5 cubic yard)
- Processing: crushing (both jaw and cone crushers), screening (triple deck screen) and stockpiling (with stacking conveyor) of rock for landscape and decorative purposes;
- Crushing between 7:00AM and 7:00PM, Monday to Saturday; blasting anytime during a regular shift; operating year round for a fifty year period (Sept. 1, 2018 to Aug. 31, 2068);
- Maximum annual extraction of 59,000 T of 1-12 inch clear material;
- New access construction (0.4km) and modification of existing access (1.61 km) +/- 10m wide with proposed stream crossings (culverts);
- New heli-pad construction (0.3 ha);
- A small ATCO Trailer (2.5m x 6.0m) for a site office, staging area (1.5 ha);
- Estimated total mineable reserves over the life of mine of 2,000,000 T;
- Total disturbance of 9.84 hectares.

## 3.4 Land Use and Status

The province of BC and the Fraser Valley Regional District (FVRD) entered into an agreement in 2001 to establish a regional park (Sumas Regional Park) on certain lands on Sumas Mountain with the intent that the lands would be used as a park for public use and enjoyment and conservation. In 2012 the FVRD and Metro Vancouver Regional District (MVRD) announced an agreement to create Sumas Mountain Inter-Regional Park (SMIR Park) to jointly protect and enhance lands in the Sumas Mountain area for conservation and recreation. Those lands included the existing park lands managed by the FVRD, with the intent to incorporate more greenspace on the mountain's south and west flanks owned by Metro Vancouver and the City of Abbotsford.

The Application Area is on the west exposed side of Sumas Mountain approximately 75m to 100m from the north edge of ML 1046251, which overlaps the SMIR Park to the north and east of the mining lease. The overlapping area of ML 1046251 is excluded from exploration, development and mining as per the *Mineral Tenure Act*.

The Application Area has been previously logged and planted. New trees in the area are in the order of 15 to 30+ years old and are in the regeneration stage. The land is under Woodlot Licence W2057, issued to "Sumas First Nation" on January 1, 2013 for a term of 20 years, subject to future replacement.

Lands in the Application Area, on Sumas Mountain and within SMIR Park are used by hikers, runners, cyclists, equestrians, naturalists and others for recreation, enjoyment and spiritual purposes. A popular network of trails exists on the mountain; some of which traverse or are in close proximity to Application Area. A public vehicle parking lot for park users is situated approximately 125m south of the Application Area on the Sumas Mountain Forest Service Road.

## 4.0 First Nations

## 4.1 Consultation

The Province has a duty to consult and, if appropriate, accommodate First Nations with respect to decisions that could adversely impact asserted or established Aboriginal or treaty rights and title ("Aboriginal Interests"). The content of the duty to consult varies with the circumstances.

Many First Nations have asserted traditional territories overlapping the Application Area. The province initiated consultation with these First Nations on August 9, 2017 and has received, accepted and considered input from First Nations as part of its consultation process.

## 4.1.1 Consultation under the Stó:lō Strategic Engagement Agreement

Mineral tenure 1046251 and the Application Area lie within S'olh Téméxw (Our Land: Our World), the asserted traditional territory of the Stó:lō people. In 2014, the Province and sixteen Stó:lō First Nations entered into a Strategic Engagement Agreement (Stó:lō SEA), that sets out the process by which the Province will consult the Stó:lō First Nation signatories (Stó:lō First Nations) with respect to proposed activities in a defined geographic area. The SEA process applies to the Application Area and this process was followed for consultation with these sixteen Stó:lō First Nations.

The People of the River Referrals Office (PRRO) is the organization identified under the SEA as responsible for administering all referrals relating to a proposed activity that may impact the territories of the Stó:lō First Nations. The PRRO assesses potential impacts on behalf of Stó:lō First Nations and helps coordinate engagement with the Province.

Consultation with the Stó:lō First Nations, which includes a smaller subset of First Nations understood to most likely be affected by the Application, was carried out in accordance with the Stó:lō SEA. An initial referral was submitted to the PRRO via the Stó:lō Connect web portal on August 10, 2017. The Province engaged both with the PRRO and directly with specific Stó:lō First Nations. The PRRO identified Sema:th (Sumas) and Leq'á:mél First Nations as the communities to be engaged with on the Application along with their positions to reject the Application.

The Final Engagement Level under the SEA was confirmed by the PRRO as Level 3 (Extensive). Consultation with Sema:th First Nation (SFN) was considered to be Deep, and consultation with Leq'á:mél First Nation (LFN)to be Normal, based on consideration of the strength of claimed Aboriginal Interests and potential adverse impacts discussed in sections 4.2 to 4.4 below.

Consultation for a proposed quarry for decorative stone dates back to 2011 when referrals were first sent to First Nations regarding a *Lands Act* Lease application (file 2410612) for a quarry over essentially the same ground as the current Application. The file was held in abeyance for three years to allow the Applicant to resolve internal management and financial issues. A decision to disallow the lease under the *Lands Act* was made in May of 2014 following an email from the Applicant informing the Ministry of Forests, Lands and Natural Resource Operations that they would instead be pursuing a permit under the *Mines Act*. SFN were opposed to this initial quarry

proposal, and their current concerns and opposition are consistent with the responses received on this Application.

The Applicant's description of First Nations engagement activities in the current Application indicates that company personnel consulted with Chief and Council of the SFN four years ago. The company's engineer also had a meeting with the Chief and explained that 266531 BC Ltd. was in the process of developing a quarry on Sumas Mountain. The Chief conveyed to the Applicant that the mountain was, in the eyes of the SFN, sacred land and therefore the SFN was not in favour of any development on the mountain. The Chief conveyed to the company the band was not interested in any resource development and/or being part of any resource development on Sumas Mountain. The Applicant states there is no documentation from the company's meetings with First Nations.

## 4.1.2 Consultation with Other First Nations

In addition to consultation through the SEA, the province sent consultation letters dated August 9, 2017 to the following First Nations or organizations representing First Nations:

- Cowichan Tribes
- Halalt First Nation
- Lake Cowichan First Nation
- Lyackson First Nation
- Penelakut Tribe
- Peters Band
- Seabird Island Band
- Semiahmoo First Nation
- Stó:lō Nation
- Stó:lō Tribal Council
- Stz'uminus First Nation

No responses were received by the Province from these listed First Nations.

# 4.2 Aboriginal Interests Assessment

SFN is assessed as having strong *prima facie* claim for Aboriginal rights and title to the Application Area.

LFN is assessed as having a weak-to-moderate *prima facie* claim for Aboriginal Rights and a weak *prima facie* claim for Aboriginal Title to the Application Area.

## 4.3 Summary of First Nations Concerns and Input

The following potential impacts were provided by the PRRO, SFN and LFN:

## 4.3.1 Cultural Heritage

 According to the S'ólh Téméxw Use Plan, Sumas Mountain is considered a cultural landscape feature zone representing terrestrial sites on the landscape that are integral to Stó:lō worldview and establishes their unique relationship with the land and resources of

- their traditional territory; avoidance/no impacts is the preferred policy with respect to any development proposals;
- The Application Area overlaps a resource harvesting site where Stó:lō have harvested resources critical to their cultural, spiritual, and/or physical well-being. SFN have indicated that they still collect traditional medicinal plants in the area;
- The Application Area overlaps a Spiritual Practice Site where Stó:lō ceremonies are held, critical to their cultural and spiritual wellbeing;
- The Application Area overlaps a Sxwōxwlyám site, tied to Stó:lō oral histories of the distant past. Sumas Mountain plays a central role in the SFN flood story where they fled for refuge;
- The Application Area is situated in an area of high archaeological potential, as determined by the archaeological potential model utilized by the PRRO;

#### 4.3.2 Environmental

- Potential impacts to the integrity of terrestrial environmental values; Sumas Mountain is a highly culturally sensitive area and for the collection of traditional medicinal plants;
- Potential impacts to the integrity of aquatic environmental values;
- Potential impacts to the integrity of floral and faunal environmental values;
- Potential impacts to the integrity of fish related environmental values;
- Proximity of the project area to Chadsey Lake (650m), an area of significant cultural, ecological, and spiritual value for SFN. Recent Traditional Use and Occupancy (TUOS) identified significant cultural heritage, traditional use and other cultural resource related values associated within this area;
- Sumas Mountain is considered sacred to SFN and other First Nations;
- Loss of access for cultural pursuits such as harvesting, hunting, and traditional and ceremonial practices.

## 4.3.3 Health

 The project has potential to negatively impact land and resource sustainability in S'ólh Téméxw. (impacts to the health, safety and well-being of Stó:lō members and their communities).

SFN have expressed their unequivocal opposition to the project in writing and follow up meetings have only solidified this position. The LFN have also expressed their unequivocal opposition to the proposed quarry.

The PRRO provided their final consultation report indicating the referral had been rejected by SFN and LFN and that the Stó:lō SEA decision has been made to reject the Application.

## 4.4 Impacts Assessment

A seriousness of impacts assessment for the proposed quarry was completed by the province. The assessment concluded the project represents serious impacts to both Aboriginal Title and Rights for SFN.

The following are the key impact factors that were considered particularly relevant in assessing the seriousness of impacts.

- The length of the Application term (50 years) and with operations proposed year-around, would
  effectively prevent First Nations from using the land within the Application Area for a duration
  of ten years (term of the lease), and potentially beyond for the remaining mine's life, unless
  permission for access is granted from the mine manager.
- The amount of new disturbance proposed in the application is 9.8 hectares and includes an area of 7.7 hectares over which quarry rock will be removed at a rate of up to 59,000 tonnes/year.
- It is expected that the quarry operations proposed in the Application would result in an increase in truck traffic along roads on Sumas Mountain.
- Quarry operations would include continuous use of heavy machinery and are expected to result
  in a significant increase in noise immediately surrounding the Application Area. Blasting will
  occur periodically and is expected to result in temporary access, exit and area restrictions, and
  significant noise disturbance over a much greater area than just the quarry permit area.
- The number and size of existing permitted mines (quarries) on Sumas Mountain were considered in assessing the cumulative effects of existing development on Sumas Mountain and the impacts to availability (diminished area) and opportunity to exercise Aboriginal interests (i.e. harvest traditional medicinal plants, hunting, spiritual practices).
- Consideration has been given to the First Nations' perspective on the impacts to their use of the
  Application Area and more generally on Sumas Mountain. SFN, LFN and the PRRO have all stated
  their outright opposition to the Application given the significant ecological, cultural and spiritual
  values that exist across Sumas Mountain, including the surrounding the Chadsey Lake area
  (650m northeast of the Application Area), for a substantial number of decades.

# 4.4.1 Impacts to Aboriginal Rights

Numerous factors were considered in the Province's assessment of the overall seriousness of impact of the Application to Aboriginal rights; however the following describes those factors given the greatest weight. Impacts to Aboriginal rights were considered for SFN and LFN.

SFN and the PRRO have indicated that the Application Area overlaps with sites used to harvest traditional medicinal plants. If permitted, the quarry would effectively prevent First Nations from pursuing such activities within the Application Area for at least the duration of operations and site reclamation. The availability of such plants elsewhere throughout Sumas Mountain is unclear. However, it would seem reasonable to infer that based on the site's proximity to the public parking lot, the quarry, if permitted could materially affect how and when SFN accesses these plants and as a result, weak to moderately impact the Aboriginal right to harvest plants.

A similar argument can be made for SFN's Aboriginal right to harvest wildlife; Sumas Mountain is understood to have provided important deer hunting opportunity. If permitted, the quarry could displace deer and materially affect how, where and when SFN access and travel to hunting areas, and as a result, weak to moderately impact the Aboriginal right to hunt.

Consideration has been given to the serious impacts to the social and cultural context of exercising Aboriginal rights. The Application proposes significant disturbance to the immediate Application Area and will likely impact the experiential component of exercising Aboriginal rights, particularly with respect to peaceful enjoyment. Further, serious impacts to the social, cultural and spiritual aspects are expected as a result of the Application Area overlapping ceremonial and spiritual sites. Impacts to medicinal plants have also been considered within this context.

# 4.4.2 Aboriginal Title

Numerous factors were considered in the Province's assessment of the overall seriousness of impact of the Application to Aboriginal title; however the following describes those factors given the greatest weight. Impacts to Aboriginal title were considered only for SFN.

On the use and occupation component of Aboriginal title, the Province considers the seriousness of impacts to be serious. The degree and extent of alienation of the area, the degree and functional effect of the disturbance, access restrictions and impacts to the experience and enjoyment of SFN members in the area were all considered.

The Application is viewed as being incompatible with SFN's vision for the land and would directly conflict with their land use objectives, their ability to proactively use and manage the land and to make decisions in the Application Area.

Regarding economic benefits, SFN would in no way benefit from the Application. SFN have not indicated through consultation a desire; however, Any potential aspirations on the part of the SFN to pursue economic development in the area would likely be directly impacted with the presence of an operating quarry.

Based on the above factors, the Province has concluded that the impacts to both Aboriginal rights and title as a result of the Application are likely to be serious.

# 4.5 Conclusion on Consultation and Accommodation

In making my decision on the Application, I have considered all key issues raised during the First Nations consultation process, even if they are not specifically identified in these reasons for decision.

I have been advised by First Nations relations staff directly involved in consultation of the seriousness of impacts to Aboriginal Interests and that given the lack of accommodations available to address these there is significant risk in issuing a permit based on the Application and information before me.

Review and careful consideration of all relevant information, has led me to conclude that consultation between the Province and First Nations has been adequate and meaningful and that the Province's legal obligations have been met. . It is my understanding that the terms of the SEA have been followed.

I have concluded that issuing a permit based on the Application and information before me would result in serious, immitigable impacts to Aboriginal Interests and that no accommodation is available at this time to address those impacts.

# 5. Other Agency and Local Government Concerns

# 5.1 Ministry of Forests, Lands & Natural Resource Operations - Chilliwack Forest

The Applicant indicated the total volume of timber to be cut under this proposal would not exceed 50m<sup>3</sup> of merchantable timber and therefore only a Free Use Permit issued by MEM is required.

Under section 52 (1) of the *Forest and Range Practices Act*, "A person must not cut, damage or destroy Crown timber unless authorized to do so". This legislation indicates that it is unlawful to cut, damage or destroy Crown timber of any size unless authorized; it does not distinguish between merchantable and non-merchantable. The Applicant would be required to obtain authorization from the Ministry of Forests, Lands, Natural Resource Operations & Rural Development.

Before using a Forest Service Road for industrial purposes, the Applicant would have to acquire a Road Use Permit from the Chilliwack Natural Resource District. Before doing any work or improvement within a Forest Service right of way (Sumas Mountain Forest Service Road), the Applicant would have to acquire a Works Permit from the Chilliwack Natural Resource District.

# 5.2 Fraser Valley Regional District (FVRD)

The FVRD manages Sumas Mountain Inter-Reginal Park (SMIR Park) jointly with the MVRD. The FVRD objects to the proposed mining activity, and raises certain concerns, some of which are described below:

- A Permit to remove aggregate is required under the FVRD Electoral Areas Commercial Gravel Operations Bylaw No. 1181, 2014.
- FVRD Zoning does not permit aggregate processing. OCP policies do not support aggregate
  processing and state that the potential impacts of aggregate operations in the area should be
  considered in terms of their cumulative impacts, because there are a number of such operations
  already in the area.
- The Sumas Mountain Inter-Regional Park (SMIR Park) parking lot facility and trails are directly adjacent or travel through the proposed extraction site. Park impacts also include; visual, noise, dust and vibration impacts.
- There are potential environmental and hydrological impacts to Sumas Mountain habitat adjacent to SMIR Park, including potential impacts to Mountain Beaver (Species at Risk).

While local governments can zone with respect to secondary processing, they cannot regulate mining itself. Notice of the FVRD's bylaws was communicated to the Applicant. The FVRD provided comments on the Crown land referral for the same land in 2011 and a Mining Lease referral in 2015. In both instances the FVRD raised strong objections to the proposed Crown lease and mining activity.

## 5.3 Metro Vancouver Regional District (MVRD)

The MVRD manages Sumas Mountain Inter-Reginal Park (SMIR Park) jointly with the Fraser Valley Regional District (FVRD).

MVRD is opposed to the mining activities as described in the Application. MVRD opposed a 2011 application to the Ministry of Forests, Lands and Natural Resource Operations for a *Land Act* Lease to

establish a quarry in the same general area as the current Application. MVRD's concerns are summarized below:

- No impact assessment has been provided with the Application.
- Quarry operations require tree, ground cover and soil removal, and generate noise, dust, traffic and visual alterations of the landscape. This can degrade wildlife habitat and corridors, hydrology, and other environmental and cultural values.
- Existing trails connecting the staging and parking area for the park to internal trails are directly affected by the proposed works.
- The overall visitor experience and safety are expected to be impacted by the quarry activities (including dust, noise, vehicle traffic, access disruption).
- Recreationists in vehicles and on bicycles would share the same Forest Service Road mountain access.

## 6. Public Concerns

Public notice of the Application was advertised in the BC Gazette, Abbottsford News and by a public notification sign posted on a trail access on the southern boundary of the proposed mine area. A copy of the Application including supporting documentation was available for public viewing at Clearbrook Public Library in Abbotsford.

Sumas Mountain is recognized for the recreation features and opportunities it offers Lower Mainland residents. As the surrounding area is used recreationally for a number of activities, there is potential risk to those user's health and safety in and proximal to the Application Area.

Existing recreational uses in and around the Application Area are reported to include: hiking, trail running, mountain biking, horseback riding, nature/wildlife viewing and birdwatching, and spiritual endeavours. Recreational and other public users who access and use roads and trails in and around the Application Area include:

- Fraser Valley Mountain Biking Association (FVMBA)
- Abbotsford Trail Running Club
- Fox Fleet Female trail runners
- Valley Vertikiller Trail Races
- Run for Water (R4W, a registered charity that has hosted trail running races)
- Central Fraser Valley Search & Rescue

All of the above have expressed their opposition to this project. Significant public opposition was noted in an online petition. Many of the concerns raised by the public are similar to those mentioned by the FVRD and MVRD.

My review of the Application Area indicates that it completely overlaps a 140m length of former logging road which is now used as a walking / biking trail by a substantial number of the public, thus eliminating

access to the rest of the road/trail beyond. The road/trail beyond the Application Area is used as the primary hiking access route to Chadsey Lake in SMIR Park.

The boundary of the Application Area is within 50m of over 1,000 linear metres of two former logging roads now used as walking / biking trails by the public. These trails exist on both the north and south sides of the proposed quarry. A portion of these routes on the south side of the Application Area is used for vehicles to access and service the SMIR Park and communications infrastructure (microwave / repeater stations) east of and beyond the Application Area. The main (upper) public parking lot on the Sumas Mountain Forest Road serves as the only public entrance and staging point for SMIR Park. The parking lot is within 130m to the south of the proposed quarry boundary.

Even though many trails, routes and roads exist outside the Application Area, they would be impacted by the proposed mine activities (primarily blasting) in terms of the timing for use of access, as these routes would have to be closed to the public for periods of time, guarded and monitored for safety to protect the public from approaching the Application Area during a blast, and then for clearing an area after a blast. The Application Area and its periphery could pose a significant challenge to monitoring and public safety for those on nearby trails and roads.

Other concerns or impacts, both within and outside the Application Area include:

- Temporary (during periods of blasting) or near-permanent (decades) loss of roads and existing trail infrastructure;
- Significantly increased heavy-duty commercial vehicle traffic volume and frequency on a winding gravel surface road shared with the public;
- road safety related to steep grades, steep side-slopes and drop-offs, size and type of vehicles, road widths and pull outs, limited visibility due to sharp bends, slow vehicle speeds and long stopping distances for loaded vehicles heading down hill, access may need to be radiocontrolled, further limiting access to SMIR Park by the public and maintenance workers;
- potential impacts to hydrology and hydrogeology, from the Application Area and road run-off;
- loss of ecosystem habitat, green-space and potential impacts to aquatic environments.

# 7. Ecosystem Concerns

A Sensitive Ecosystem Inventory (SEI) of Sumas Mountain was drafted in 2010. It noted over 40 species at risk and six ecosystems at risk on Sumas Mountain. The conversion of natural areas to other land uses on Sumas Mountain has resulted in habitat loss and fragmentation, leading to reduced tree cover, water sedimentation and pollution, changes in hydrological regimes, intensive recreational use and the spread of invasive plant species.

The SEI noted young forests on Sumas Mountain are generally greater than 30 to 40 years old and can be important habitat areas for many wildlife species They serve as primary connections between ecosystems in a highly fragmented landscape. Over time, if no additional disturbances occur, many of these ecosystems may develop into mature forest and eventually older forest class ecosystems.

Red-listed (i.e., endangered) species known or suspected to occur in the SMIR Park include:

Pacific Giant Salamander

Peregrine falcon

Spotted Owl (observed 1959)

Pacific water shrew

Western Long-eared Myotis (bat)

Keen's Long-eared Myotis (bat)

Snowshoe hare

Mountain beaver

- Chadsey Lake area

- throughout

- throughout

- Chadsey Lake

- coniferous/mixed forest/bluffs

- coniferous/mixed forest/bluffs

- coniferous forest/mixed forest

- coniferous forest/shrub-grass

Blacktail deer, black bear, coyote and bobcat are also known to range throughout Sumas Mountain.

Two red-listed wildlife species worthy of note are the mountain beaver and Pacific water shrew. In Canada, the mountain beaver is unique in BC and limited numbers occur in the Fraser Valley. One of the main concentrations is near Sumas peak, in open shrubby and grassy areas and in the adjacent coniferous forest.

Recommendations of the SEI included:

- Maintain as much habitat as possible to sustain population viability of species, particularly those already at risk due to specialized habitat requirements.
- Establish buffers around core habitat and other core conservation areas to protect against possible adverse effects from adjacent land use, and to preserve linkages between these areas.

# 8. Application Review and Response from the Applicant

The Notice of Work (NoW) online application form requests the Applicant to provide descriptions of the proposed mining activities and other information relevant to the application. Where information or a description is unclear, lacking or absent, a mines inspector may request additional information.

Pursuant to Part 10.1.1 (1) of the Code, the proposed mine plan and reclamation program filed with the inspector in compliance with section 10 (1) of the Mines Act, shall consist of the appropriate NoW forms together with such other information as the inspector may require, for approval of placer mining, sand and gravel pits, rock quarries and industrial mineral quarries.

Part 10.1.3 of the Code states that the application shall include certain information, including the following:

- (b) the present use and condition of the land and watercourses including:
  - (i) land ownership, including surface and mineral rights, licensed or permitted users,
  - (v) fisheries and aquatic resources,
  - (x) wildlife,
- (c) established and asserted aboriginal and treaty rights;
- (d) a mine plan including:
  - (iv) development schedule for construction and mine sequencing,
  - (vi) designs and details for ... stockpiles, ... water management structures, water storage... road construction and significant transportation infrastructure, compatible with environmental protection, reclamation and mine closure,

- (e) a program for the environmental protection of land and watercourses during the construction and operational phases of the mining operation, including plans for
  - (iii) erosion control and sediment retention, and
  - (iv) environmental monitoring and surveillance designed to demonstrate that
    - (A) the objectives of section 10.4.4 (a) of this code are being met,
    - (B) the reclamation standards as outlined in section 10.7 of this code are being met,
    - (C) environmental protection of land and watercourses required under paragraph (g)
      (i) and (ii) of this section are being achieved and maintained,
  - (j) any other relevant information required by the chief inspector.

After considering the above, and other parts of the Code, and having reviewed the Application and input from referrals, public and consultation, I requested additional information from the Applicant on October 27, 2017. I visited the Application Area on November 9, 2017 and made my own observations of the proposed access and the east end of the proposed mine area (Application Area).

Following the visit and review of additional input from referrals, consultation and the public, I made a second request for information from the Applicant on November 22, 2017.

I requested the information to supplement that already provided in the Application, to fill in what I considered gaps in the Application, and to ensure the Applicant had sufficiently considered relevant concerns that may be raised at a potential public meeting to be hosted by the Applicant.

I believed that much of the information I sought was relevant under the *Mines Act* and the Health, Safety and Reclamation Code for Mines in British Columbia (Code). My information request also included notification of other legislation and bylaws, in anticipation of questions that may be raised at a public meeting.

The information requested and notifications provided are summarized below:

- Ensure the relevant information required as per Part 10.1.3 (Application Requirements) and Part 10.1.17 (Preparation of Plans and Programs) of the Code is addressed
- Information under Part 10.7 of the Code regarding Reclamation Standards. These included Part 10.7.1 (Reclamation Defined) and Parts 10.7.4 (end land use) through 10.2.21 (monitoring) of the Code regarding land use and reclamation. The Applicant was requested to provide a thorough and comprehensive Reclamation, Monitoring and Closure Plan
- Request to submit an ecological risk assessment as per Part 10.7.18 of the Code, based on reports of sensitive and threatened (Blue) listed species in the area
- How to address potential impacts from haul truck traffic on un-surfaced and surfaced public roads on and around Sumas Mountain (traffic volume and control, density, safety, dust, maintenance, etc.);
- Impacts on the nearby parking area (Mountain Bike Staging Area)
- Mitigate or address potential impacts to loss of trail use for mountain biking and hiking;
- Mitigate or address potential impacts on use and enjoyment of adjacent / nearby trails from noise, dust, blasting, traffic, etc.;

- Mitigate or address potential impacts on fish (from road creek crossings and potential sediment run-off from site) and local wildlife;
- Address concerns related to local hydrology and control of run-off (quantity and quality) in periods of high intensity and duration precipitation events;
- Visual impact management impacts
- On-site sediment and erosion control measures to prevent off-site impacts
- Provide mapping that indicates the storage location of soil and overburden stockpiles for later
  use in reclamation, and how they will be managed (protected, i.e. kept viable) until ready for
  final use in reclamation;
- How to mitigate or compensate the owner of the woodlot licence over the proposed quarry
- Notification that FVRD zoning does not permit aggregate processing.
- Notification that the area of the proposed quarry is zoned LU/R-1 (Limited Use / Resource) as per Sumas Mountain Rural Land Use Bylaw No. 500, and that the proposal will require rezoning
- The need for a Road Use Agreement with the road use permit holder for the use of the Sumas Mountain Forest Service Road (SMFSR). Awareness of work and costs that may be required for road upgrades
- How to mitigate impacts to other road users, including SMFSR and hiking/bike trails
- Communications with any local First Nations, especially the Sumas First Nation, and to provide a summary of the Applicant's engagement record with them.

The Applicant was asked to contact me if he had any questions or comments on the above information. I did not receive any questions, comments or any communication from the Applicant with respect to the above information request and notification.

Regarding reclamation for example, the NoW form requires an applicant to describe the proposed reclamation and timing for a specific activity. In most instances, the Applicant's description was simply that reclamation would be carried out when the mining operation ceased.

Regarding reclamation of the pit, the Applicant's description in the NoW was simply that stockpiled overburden will be spread over benches and seeded with grasses suitable for the area. The Applicant previously indicated the current land use as forestry yet did not provide details as to how the site would be reclaimed back to productive and functional forest. Nor did the Applicant indicate that any progressive reclamation would be carried out during the life of the mine. Overall, I found the description of the reclamation program as submitted was lacking in detail, therefore prompting my request for more details.

Failure to progressively and fully reclaim the Application Area to the eventual end land use of forestry would have a negative impact on the future of the area as a woodlot. While the current woodlot licence has a term of 20 years, there is potential it could be renewed in the future. A quarry on the site for 50 years, plus time for regeneration, substantially increases the time-frame for realizing the full timber value from the Application Area, compared to the time within which the timber values could be realized if the quarry did not exist. Along that same line, the Applicant did not respond to my request of if, or how, the woodlot licence holder (SFN) might be compensated for loss or delay of timber values.

Considering the woodlot licence holder is the SFN, I found the Applicant's non- response to my question of compensation, demonstrated a lack of fairness on its part, by not considering the rights to another resource holder over the same ground.

Knowing a Sensitive Ecosystem Inventory (SEI) of Sumas Mountain had been prepared in 2010, and that it noted there were over 40 species at risk and six ecosystems at risk on Sumas Mountain, I requested the Applicant to submit an ecological risk assessment as per Part 10.7.18 of the Code over the Application Area. Though the site had been logged previously and was in a state of regeneration, I wanted to verify what, if any, impact there may be to the ecology of the Application Area, and what, if any, impact a quarry could have on the surrounding ecosystem. The Applicant did not provide any information in this regard, nor respond to my request for an assessment in this regard.

It has been clearly demonstrated in the responses to referrals that the upper elevations of Sumas Mountain, including the Application Area, and indeed SMIR Park generally is very popular with many outdoor enthusiasts, recreationalists and others, who live in the lower Fraser valley and Lower Mainland. With population growth expected to increase in this region for the foreseeable future, the use of established parks, existing recreational areas and use of recreational infrastructure such as trails peripheral to these areas, will face similar increases in use by the public. It is reasonable to expect that public use of the roads and trails and off-trail areas, will increase over time on Sumas Mountain.

If the Application Area is approved as a quarry for fifty years, and if the road and trail accesses remain open to the public around the Application Area, and in SMIR Park, I see increasing potential for public safety issues related to vehicle traffic and blasting. I also see loss of peace and enjoyment to the public due to noise from equipment, traffic, and blasting, and potentially to dust.

If the Application Area is approved as a quarry for fifty years, and if the road and trail accesses around the Application are closed to the public for certain periods, public safety issues are likely decreased, however the loss of use and enjoyment of the area is restricted.

The Applicant has provided a blast plan with guarding procedures. The plan indicates all personnel will be cleared from the area surrounding the blast zone (danger zone), guards will be in place with radio communication, and that all roads, trails and accesses are to be cleared and guarded. Given the proximity of trails to the Application Area, guarding from the public may pose a challenge, especially to those moving quickly by on mountain bikes. The high use and expected increasing public use of the area around the proposed quarry may likely pose an increasing challenge to public health and safety for the proposed fifty year life of the quarry.

According to the Application, noise is not expected to be a significant problem as the nearest residence is located some 1.25km west of the proposed quarry operation. This may be true for residences, and the Applicant states noise levels will be monitored to ensure that neighboring properties would not be affected. However one would expect noise could be a significant problem for park visitors who may park vehicles 130m away or travel on hiking trails 25 m away from the quarry boundary. The Application does not consider the impacts of noise from the quarry on SMIR Park visitors and other recreational users in the area.

According to the Application, dust will be controlled at all times to prevent impact to the environment, people and property. The control of fugitive dust created by the development, processing and operation of the quarry will be controlled by water and dust palliatives if required. The Application does not state the location of the water source; the estimated volume of water needed, and what, if any impacts there may be to the water supply from pumping to obtain the water.

The Application states that the proposed pit area, being on the west exposed side of Sumas Mountain, approximately 1.3km east of the City of Abbottsford border some 300m in elevation above the nearest residence, may not be generally visible from any residences or stakeholders in the area. My own experience at the Application Area suggested the area would be visible from the Fraser valley and Abbottsford. Tree growth below and west of the Application Area may gradually hide the disturbance caused by the quarry over time.

After trying to contact the Applicant (via the agent) in October and November about the Application, and not receiving a response, I contacted the Applicant a third time, at the end of February, 2018 to inquire when I might receive a response to my questions, emails and request for more information. I was informed that the Applicant had not made any effort to respond to my requests, and that it did not intend to. Instead, I was informed the Applicant was focusing all its efforts on negotiating a sale of the ML, if the sale did not happen, the Applicant would withdraw its Application for a Mines Act permit for the quarry.

On February 27<sup>th</sup>, with that information, I informed the Applicant that I believed a sufficient amount of time had passed to respond to my information requests and questions, and in light of our communications, I had no reason not to proceed to a decision on the Application at that time with the information that was before me.

## 9. Conclusions and Decision

The BC MEMPR facilitates and encourages a thriving, safe and environmentally responsible mining sector, while minimizing the health, safety and environmental risks related to mining activities. With this in mind I have considered whether or not the Application before me, should it be approved, could result in adverse impacts to the physical nature of the site, existing and surrounding infrastructure, First Nations aboriginal interests, and the health and safety of the people in the lower Fraser valley and Lower Mainland who currently use the area and who will continue to increasingly use the high elevation areas of Sumas Mountain, regardless of the existence of a quarry.

I understand that decisions under the *Mines Act* are about mine operations, and whether such operations can be conducted in a way that adequately addresses health, safety and environmental concerns; not about land use and whether a particular use of land is appropriate.

Having reviewed the responses and concerns about the Application from referrals, consultation and the public, I considered whether the responses and concerns were relevant to the health, safety and interests of the public and First Nations and the protection of the environment. I decided many of the responses and concerns were valid and relevant.

Pursuant to Part 10.1.1 (1) of the Code, the proposed mine plan and reclamation program filed with the inspector shall consist of the Notice of Work forms with other information as required by the inspector. Other information was requested by me, as specified above. The Applicant offered no response or comment to my requests or questions that might supplement or further support the Application.

As per section 10 (1) of the Mines Act, as part of the application for a permit there must be filed with an inspector, a program for the reclamation of the land and cultural heritage resources affected by the mine. A general reclamation plan was provided by the Applicant, however I found the plan lacking in details, as referred to in earlier sections. The Applicant did not respond to my request for details of the proposed program for the reclamation of the land and cultural heritage resources affected by the mine.

As per section 10 (1) of the Mines Act, as part of the application for a permit, there must be filed with an inspector, a plan outlining the details of the proposed work. A plan was provided by the Applicant, however I found the plan lacking in details, as referred to in the previous sections above. The Applicant did not respond to my request to provide such details of the proposed work. No response was provided by the Applicant to my invitation to discuss this part of the application requirement.

As per section 10 (1) of the Mines Act, as part of the application for a permit, there must be filed with an inspector, a program for the conservation of cultural heritage resources. The Application did not provide a program for the conservation of cultural heritage resources. Information was requested from the Applicant regarding this application requirement, but no response was provided by the Applicant.

The Notice of Work (NoW) application form requires descriptions of the proposed reclamation for specific components of the mining activities. The responses given in these sections acknowledged that reclamation would be carried out on completion of all mining operations, but it did not provide a description of the reclamation to be carried out, or was lacking sufficient detail. The Application did not provide a reclamation program with sufficient detail to demonstrate that the stated end land use (forestry) could successfully be achieved, that being a "free-to-grow" forest, equivalent to the forest currently on the Application Area.

The Applicant stated that progressive reclamation of the site would not take place. While it is understood that reclamation of the site is something that would take place in the future, I would like to have seen a better effort to demonstrate that the Applicant had at least turned his mind towards this important aspect of the project. I did not find it unreasonable for the Applicant to invest some effort in fulfilling this request prior to creating a physical disturbance of the ground.

The Applicant has estimated the total volume of timber to be cut for construction of the proposed quarry would not exceed 50m<sup>3</sup> of merchantable timber and only a Free Use Permit would be required. As per the Forest and Range Practices Act, a person must not cut, damage or destroy Crown timber of any size unless authorized. Based on my direct observations of the Application Area, the

volume of timber to be cut has been greatly under-estimated. Therefore the Applicant would be required to obtain authorization from the Ministry of Forests, Lands, Natural Resource Operations & Rural Development.

The Applicants disregard for progressive and full reclamation of the Application Area to the forestry end land use would have a negative impact on the future of the area as a woodlot. A quarry on the site for 50 years, plus time for regeneration, substantially increases the time-frame for realizing the full timber value from the Application Area. The Applicant did not respond to my request of if or how it might mitigate or compensate the owner of the woodlot licence (SFN) for loss or delay in recouping timber values over the Application Area.

No ecological impact assessment has been provided with the Application, given that there were reportedly over 40 species at risk and six ecosystems at risk on Sumas Mountain. I requested the Applicant to submit an ecological risk assessment as per Part 10.7.18 of the Code, which states where there is a significant ecological risk, reclamation procedures shall ensure that levels are safe for plant and animal life and, where this cannot be achieved, other measures shall be taken to protect plant and animal life. The Applicant did not provide any information, nor respond to my request for an assessment to verify what, if any, impact there may be to the ecology of the Application Area, and what, if any, impact a quarry could have on the surrounding ecosystem.

The Applicant did not respond to my request for additional information related to impacts from blasting, noise, dust, water or visual management concerns, as outlined in Section 8 above.

Not all concerns raised by referral to public agencies and the public process are relevant or can be addressed in relation to an authorization. However I believe some of these issues are important. I have determined that certain concerns are relevant in the context of this Application and the *Mines Act*, and that they should be addressed by the Applicant prior to issuance of a *Mines Act* permit.

The disturbance from the proposed quarry would take place over a considerable length of time, projected to be 50 years. Considering the current high use of the SMIR Park area by the public, and that such use would likely increase over the life of the mine, the proposed quarry would result in long term impacts to SMIR Park visitors in terms of health, safety, and access. The Applicant offered no alternatives to aid in the establishment and relocation of new trails around the Application area to access the SMIR Park, to off-set those trails that would be impacted by the proposed quarry.

I determine there are potential adverse impacts to public health and safety, given the proposed quarry is in a high outdoor use recreational area, and in part because the Applicant has failed to provide additional information to address those impacts, especially regarding impacts from blasting to the health and safety of those using the SMIR Park parking area, mountain-bike staging area and those trails that are very close to the Application Area.

The Applicant has not addressed many of the concerns raised in consultation and referral, nor answered technical questions I have put forward, nor demonstrated how it may attempt to mitigate various potential impacts. It appears the Applicant does not have intent to proceed with the activities in this Application if a permit were to be issued.

The Applicant was made aware that other laws apply, such as local government bylaws, and that it is the Applicant's responsibility to ensure compliance with other applicable legal requirements.

The courts have been clear that an inspector can consider the zoning of land in the context of a *Mines Act* application, but that the decision should be independent of what that zoning may provide for. While I understand zoning restrictions are for the Applicant to deal with, I provided the notice of the zoning to ensure the Applicant was aware of it, and I wanted to know if and how the Applicant was going to approach that issue, especially as the issue of zoning would likely be raised at a public meeting, which I was wanting the Applicant to prepare for.

Similarly with municipal or regional bylaws, it is not an inspector's responsibility to determine if a bylaw is valid and applicable in the context of a *Mines Act* application. My interest here was if the Applicant had considered this aspect of the project and how it would respond to the question of bylaws, as it would likely be raised at a proposed public meeting.

Review and careful consideration of all relevant information has led me to conclude that consultation between the Province and First Nations has been reasonable, appropriate, meaningful and sufficient in the circumstances, and that the Province's legal obligations have been met. It is my understanding that the terms of the SEA have been followed.

I have considered whether the decision before me will result in adverse impacts to aboriginal rights and title claims of the affected First nations, especially the SFN. BC has assessed the SMF as having strong *prima facie* claims to Aboriginal rights and title in the Application Area.

A seriousness of impacts assessment concluded the project represents serious impacts to both Aboriginal Title and Rights for SFN. On the use and occupation component of Aboriginal title, the Province considers the impacts to be serious. The degree and extent of alienation of the area, the degree and functional effect of the disturbance, access restrictions and impacts to the experience and enjoyment of SFN members in the area were all considered.

The potential and expected impacts to the immediate environment are considered high for a long period of time, should a permit be granted as per the Application. Physical reclamation of the site, while not detailed in the application, may be possible, by establishing an effective subsoil layer and properly replacing and re-contouring a viable layer of sufficient top soil to the Application Area on a progressive and on-going basis with proper stability and drainage control. The disturbed areas would require revegetation and reforestation (tree-planting) and would require regular monitoring over a long time and potential amelioration. Considering the degree of impact from stripping and mining the bedrock, and limited potential for timely reclamation, accommodating the SFN for these impacts could be a significant challenge.

Given the seriousness of impacts to Aboriginal Interests and recognizing the lack of accommodations available to address these impacts, there is risk to the province in issuing a permit based on the Application and information before me. I have concluded that issuing a permit based on the

Application and limited information before me would result in serious and likely immitigable impacts to Aboriginal Interests, as I can think of no accommodation that is available at this time to address those impacts.

I have considered what I believe are all of the relevant facts and all other arguments raised, even if they are not specifically identified in these reasons for decision.

There are few individual reasons I have considered that lend sufficient weight to not issuing a permit based on the Application. However taken collectively, I believe the reasons in their entirety lend sufficient weight to not issue a *Mines Act* permit.

Since 2003, when 265531 BC Ltd was first permitted for a 9,000T bulk sample over what is now the Application area, the company has shown little to no interest in seriously exploring for or developing a decorative stone quarry, despite its stated intentions. The Applicant has applied for permits to conduct increasingly large mining activities based on little to no physical work on the ground. Despite my attempts to clarify and seek more information on the Applicant's plans and ideas, the Applicant has not responded. After what I considered to be more than enough time to prepare responses to my requests, questions and concerns, I was informed that the Applicant had in fact not turned his mine toward my requests and concerns, nor had a consultant been retained to help prepare a response. Rather, I was informed that the Applicant was instead focused on selling the mining lease to a third party. This third party was to have made a decision to purchase on or around March 8<sup>th</sup>, 2018. I was informed by the Applicant that if the sale of the mining lease was not made, the Applicant would withdraw the Application.

I informed the Applicant on February 27, 2018, that as of that day, I was proceeding to a decision on the application based on the Application as it was and based on all the information I had.

In summary, I cannot justify issuing a permit based on the Application before me, not due to one or two particular reasons, but rather due the entire weight of numerous reasons taken collectively, including the lack of information provided in the Application, considering its potential impacts on an area of high and increasing public use, the potential ecosystem impacts, and the serious potential impacts on SFN's Aboriginal rights and title claims.

Having considered the information summarized above and other relevant information, it is my decision to not issue a permit for a quarry based on this Application.

Don J. Harrison. P.Geo.

Senior Inspector of Mines-Permitting,

**SW Region** 

BC Ministry of Energy, Mines & Petroleum Resources