



Committee Report

Date of Report: 05, 04, 2022
Date & Type of Meeting: 05, 18, 2022, Rural Affairs Committee
Author: Eileen Senyk, Planner
Subject: TEMPORARY USE PERMIT
File: T2105G
Electoral Area/Municipality: Electoral Area 'G'

SECTION 1: EXECUTIVE SUMMARY

The purpose of this report is for the Rural Affairs Committee and Regional Board to consider authorizing a Temporary Use Permit for aggregate (sand and gravel) extraction and processing on property zoned Medium Industrial (M2) in Electoral Area 'G'. Expected timing is late June to end of September.

Issuance of the Temporary Industrial Use Permit (TUP) will authorize the proponent to undertake a four (4) month time-limited project involving the crushing and screening of aggregate from an authorized sand and gravel extraction area on site currently under an active Mines Act Permit.

This permit was ready for approval at the Regional Board meeting on April 21, 2022. Days before that meeting the operational dates changed due to contractor availability. The same permit is now under review, but with different dates. The new dates are June 17, 2022 to September 30, 2022. Staff recommend that the Board approve the Temporary Use Permit.

SECTION 2: BACKGROUND/ANALYSIS

GENERAL INFORMATION

Property Owner: Porcupine Wood Products

Property Location: 8564 Highway 6, Rural Salmo BC

Legal Description: LOT 1 PLAN NEP4415 DISTRICT LOT 1237 KOOTENAY LAND DISTRICT SUBSIDY LOT 71 (PID 010-362-134)

Property Size:

Total property size: 49.7 ha (122.9 acres)

Area of the property affected: 6.2 hectares (15.31 acres)

Zoning Class: Medium Industrial (M2)

OCP Designation: Industrial (M)

SURROUNDING LAND USES

North: Residential & Environmental Reserve

South: Parks and Recreation (Province of BC)

East: Residential & Environmental Reserve, Highway 6, Rail Trail, Industrial and Salmo River

West: Environmental Reserve

The subject property is located approximately 5 km north of the Village of Salmo. It is an active sawmill with the Boulder Creek Pit Mine No. 1630637 on site. Porcupine Wood Products has intermittently processed small volumes of aggregate into gravel products over the decade to facilitate the requirement for base material within the log yard facility. Aggregate extraction from the upper bench of the property is required to create a single elevation log yard. Presently, approximately half of the log yard is at the desired elevation, with the remaining on a higher, sloped elevation due to the existing topography. Developing this one larger leveled log yard will create better efficiencies in operations and safety of personnel operating equipment on site. In short, extracting the aggregate will level the slope and add level space to the log yard. Particularly, a machine called the 'Wardner' (see Figure 4) moves large amounts of logs around the log yard, and this machine cannot operate on a slope.

While aggregate extraction is regulated through the Mines Act, processing and screening of aggregate are regulated through zoning. These activities are not a permitted use in the Medium Industrial (M2) zone. At the Boulder Creek Pit Mine, screening and processing of aggregate occurs for a few weeks at a time, every few years.

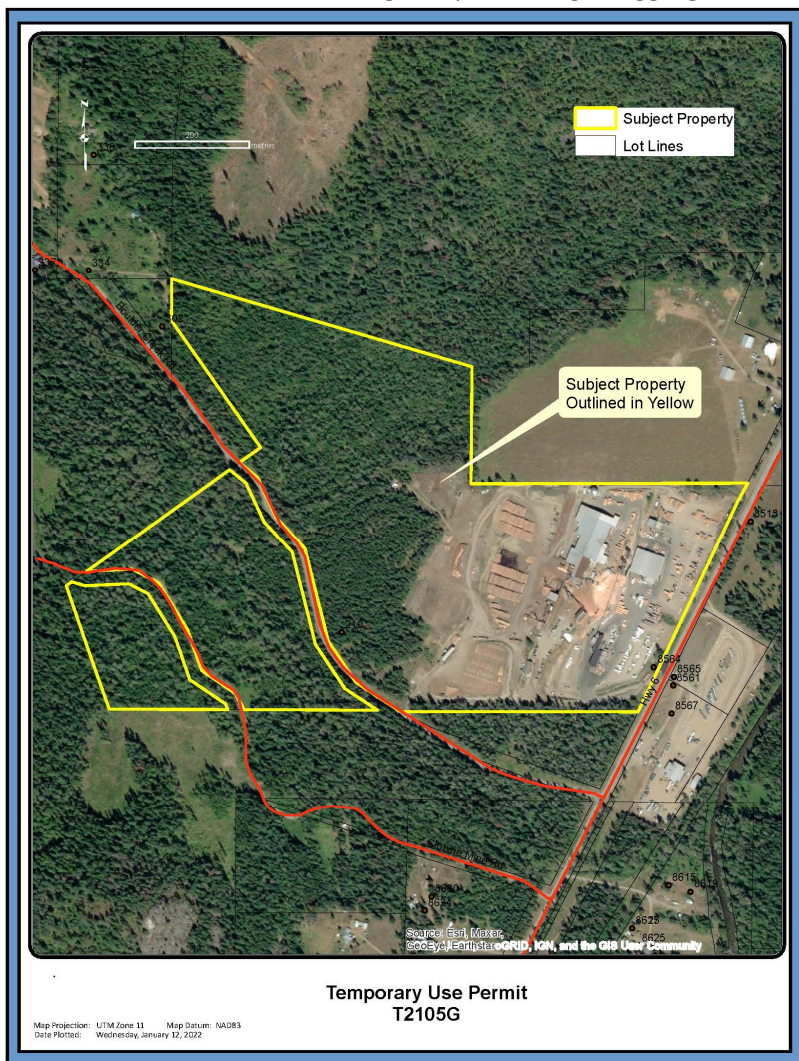


Figure 1: Overview Map

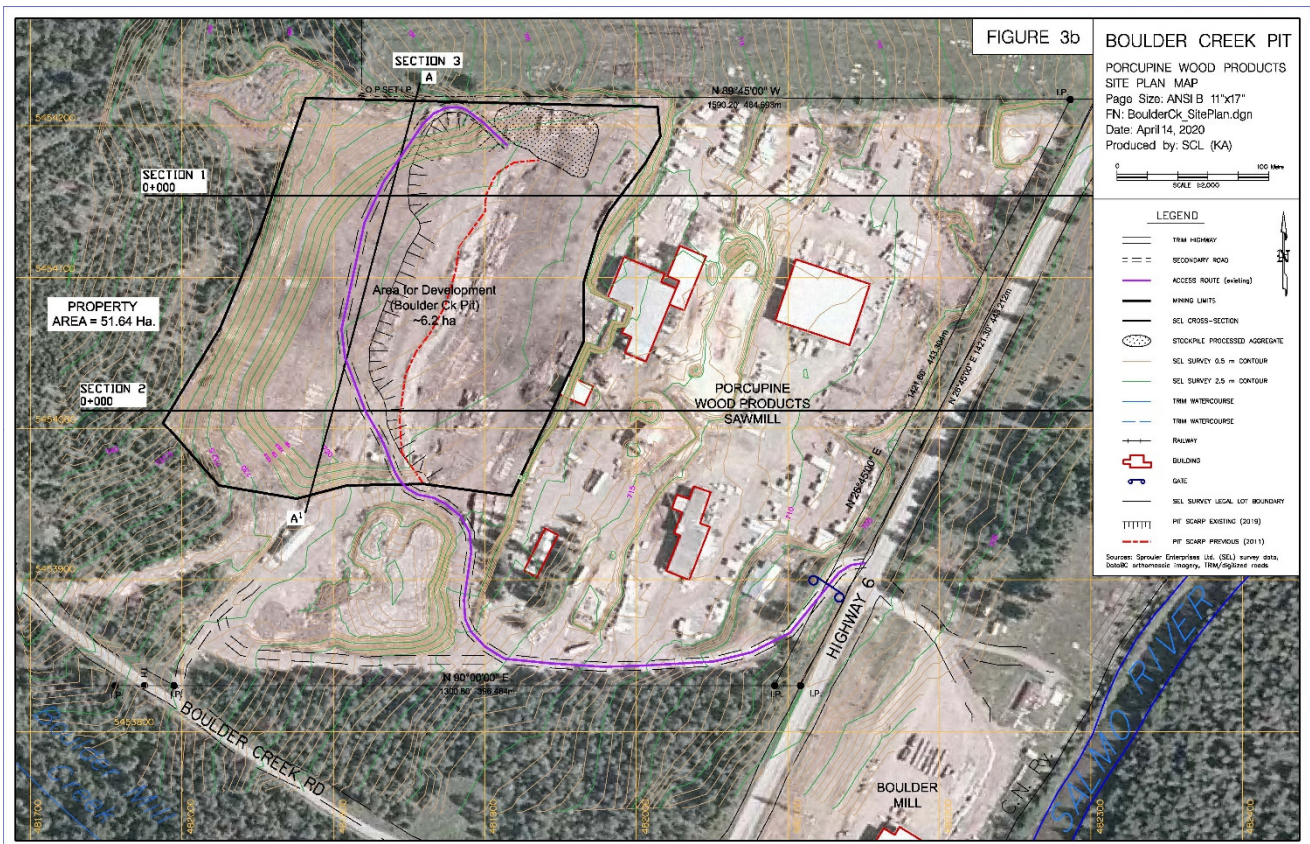


Figure 2: Site Plan



Figure 3: Face of Aggregate Mine – Mines Permit No. G-5-307



Figure 4: 'The Wardner' (left-most machine)- This machine cannot operate on a slope



Figure 5: Log Yard Area Levelled to Date



Figure 6: The last of the existing aggregate, extracted in 2017

Planning Policy

Electoral Area 'G' Land Use Bylaw No. 2452, 2018

Section 9 – Aggregate and Mineral Resources Policies:

The Regional Board:

8. Anticipates that recoverable deposits of sand and gravel will be accommodated within existing quarry or industrial designated properties as indicated on Schedule A.1 mapping and that any new proposals will be subject to application for a land use amendment or temporary use permit.

9. Will consider land use designation amendment applications for the processing of aggregate or mineral resources on the basis of a variety of criteria; including but not limited to the:

- a. extent of visual screening, and other mitigation works proposed;*
- b. type of processing proposed;*
- c. potential for noise and dust nuisance for nearby properties;*
- d. compatibility with adjacent land uses;*
- e. potential for light pollution;*
- f. potential for vibration from blasting of materials;*
- g. environmental sensitivity of the lot and adjacent land;*
- h. accessibility;*
- i. and the characteristics of the aggregate deposit and groundwater resources.*

10. Encourages full utilization of recoverable deposits prior to development in areas where recoverable deposits are located.

11. Recognizes that much of the aggregate managed by the Ministry of Transportation

and Infrastructure has been exhausted, but that such properties still serve an important role for the staging of equipment and materials during highway improvement projects.

12. Recognizes that the terms or conditions of this Bylaw cannot restrict or conflict with any mineral or mining management activity relating to the exploration or production of minerals, sand, gravel, coal or quarries that is classified as a mineral or a mine under Provincial Acts and Statutes, so long as the Province manages the activities and land for that purpose.

SECTION 3: DETAILED ANALYSIS

3.1 Financial Considerations – Cost and Resource Allocations:

Included in Financial Plan: Yes No Financial Plan Amendment: Yes No
Debt Bylaw Required: Yes No Public/Gov't Approvals Required: Yes No

Some of the aggregate is used on site, but at times market conditions are such that there is demand for the aggregate and it is sold to buyers such as utility companies.

The fee for the Temporary Use Permit was paid in full pursuant to the Planning Fees and Procedures Bylaw No. 2457, 2015.

3.2 Legislative Considerations (Applicable Policies and/or Bylaws):

Under Section 493 of the Local Government Act (LGA), the Board has the authority to issue a TUP by resolution to designated land within Official Community Plans (OCP's) where temporary uses are allowed.

Section 37.1 of Electoral Area 'G' Land Use Bylaw No. 2452, 2018 directs that the Regional Board will consider issuing temporary use permits on lands that are not designated for the proposed land use as indicated on Schedule B.1.

Under Section 494 of the LGA, if a local government proposes to pass a resolution under section 493 (1)(a) it must give notice and the notice must state:

- (a) in general terms, the purpose of the proposed permit,*
- (b) the land or lands that are the subject of the proposed permit,*
- (c) the place where and the times and dates when copies of the proposed permit may be inspected,*
- (d) the time and date when and, if applicable, the place where the resolution will be considered, and*
- (e) if the meeting at which the resolution will be considered is conducted by means of electronic or other communication facilities, the way in which the meeting is to be conducted by those means.*

3.3 Environmental Considerations

The proposal includes lands already developed for industrial purposes. The expansion of industrial activity from sand and gravel operations will include: additional portable equipment on site, potential increases to noise and increased traffic on an intermittent basis. Boulder Creek flows past the subject property but is not near the mine site. The gravel pit excavation, at its closest border, is approximately 150 m to the centre line of Boulder Creek

Road, and from this centre line to the closest stream bank of Boulder Creek is another 60 meters to the south. Therefore impact to sources of domestic and irrigation water supplies was assessed by the proponent to be low due to the siting of proposed operations.

A management plan entitled **Updated Mine Plan for Boulder Creek Pit Mine Development Period 2020 to 2025** has been provided by the proponent and is attached to this report as Attachment B

3.4 Social Considerations:

The proposal is located behind an active sawmill operation that has been in the area since the 1980s and as such, has a long established relationship with its neighbours and within the community. When a Temporary Use Permit was considered by the community in 2017, concerns with noise, dust, traffic and visibility were cited. The permit was issued and operations completed at that time. During the referral period for the current application, 47 land owners received a letter informing them of the proposal, and no responses were received from the public.

3.5 Economic Considerations:

None anticipated.

3.6 Communication Considerations:

The application was referred to 47 neighboring land owners as well as relevant government agencies. As a result of the change in the operational timing, the application is now on its third referral period. One letter was received from a neighboring land owner requesting that operational hours be shortened. The letter is included as Attachment C. The following responses were received from government agencies:

Ministry of Energy and Mines – Senior Permitting Inspector – January 14, 2022

'Thank you for the opportunity to comment on this application. The proponent currently holds a Mines Act permit that allows for sand and gravel extraction until 2025. There are no outstanding orders or requirements from an October 2021 inspection. The Ministry has no objection to the approval of the application.

Ministry of Forests Lands Natural Resource Operations and Rural Development – Habitat Biologist – Jan 17, 2022

The Ministry of Forests, Lands, Natural Resources and Rural Development – Terrestrial Resource Management Division reviewed this referral on January 17, 2022 and provides the following comments/recommendations:

- *Any stored material, soil or overburden must be kept a minimum of 15m from all streams, ponds, lakes, wetlands and/or watercourses.*
- *All structures should be constructed a minimum of 30m from any creek in order to protect the ecological integrity of the system. If this distance will be compromised, an environmental assessment completed by qualified environmental consultant should be completed to determine if the project will have impacts to the creek system.*
- *All motorized vehicles should be checked thoroughly for invasive plants prior to entering the area. The transport of invasive weeds should be avoided at all times and inspections of all machinery should be completed routinely to ensure that invasive species are not transported to new areas.*

- Ensure that all possible efforts are made during the reclamation to seed area immediately, with a native vegetation mix, in order to minimize the spread of invasive plants.
- There may be avian listed species within the project area that may be directly impacted by this project.
- A Wildlife/Danger Tree Assessment should be completed and important wildlife trees and snags should be retained where ever possible.
- Vegetation clearing should adhere to the least risk timing windows for nesting birds (i.e. construction activities should occur only during least risk period). Nesting birds and some nests are protected by the Provincial Wildlife Act Sec.34 and Federal Migratory Bird Act. Nesting periods can be identified by a qualified professional. General least risk windows for bird species are designed to avoid the nesting period. If nests are present at this site or adjacent to it and will be impacted by the works, the following work windows apply:

Species	Least Risk Window
Raptors (eagles, hawks, falcons, & owls)	Aug 15 – Jan 30
Hérons	Aug 15 – Jan 30
Other Birds	Aug 1 – March 31

Ministry of Transportation and Infrastructure – Development Officer - January 24, 2022

During the 2012 review of the similar request on this property, MOTI responded with the following:

"Additional industrial traffic at an existing industrial access driveway onto Controlled Access Highway #6. No history of an industrial access permit has been presented by applicant or found during search by reviewer. A new permit application for the industrial access for both lumber milling operations and the proposed sand and gravel operation will be required. Dependent upon traffic volumes experienced and expected the applicant may be required to provide traffic impact study for the site. Any impact study would be for the purposes of identifying safety concerns related to traffic volumes and types and would be expected to identify and define any needs for off site improvement to the highway. Seasonal load restrictions may impact the operations, existing and proposed. Monitoring impacts and compliance are required to protect infrastructure from damage and to ensure public roads remain safe for all users."

These comments are still valid. An updated industrial access permit is required on this controlled access highway for the new and continued uses of the existing access. It does not appear that the applicant made application for this permit in 2012. We would like to ensure there is follow through this time.

To my knowledge we have not yet received an access permit application for review as requested. We are requesting the applicant submit one. Additionally, seasonal load restrictions on Boulder Creek Rd and Hwy 6 may affect hauling associated with the operation, depending on timing. Restrictions are typically in place from February to late May depending on the weather.

Ministry of Transportation and Infrastructure – Development Officer – February 2, 2022

Just wanting to give you an update. I spoke to [the applicant] on the phone after your site meeting and he has since submitted his access permit application for my review.

Ymir Fire Department (RDCK) – Fire Chief – January 25, 2022

The Ymir fire hall has read the temporary use permit requested by porcupine mill and does not have any issue with them receiving the permit.

Interior Health Authority – Community Health Facilitator – February 11, 2022

In addition to ensuring compliance with the Mines Act and other pertinent legislation intended to protect workers and the public, we encourage the implementation of proactive operational measures that will keep the impact on the environment and the exposure and disturbance to humans (dust, pollution, noise, etc.) to a minimum.

Interior Health recommends that consideration is given to the product end use such as road grit or concrete mix. It is understood that it would be difficult for the RDCK to implement provisions upon a private operation of this nature. However, if for example this renewal is intended to accommodate the local area with winter road traction material, it would be pertinent to ensure that the pit contains material suitable for road grit so as to not result in a community PM 10 Dust Advisory.

Pages 6 and 7 in the Ministry of Environment Best Management Practices to Mitigate Road Dust from Winter Traction Materials provides information in this regard - <https://www.for.gov.bc.ca/hfd/library/documents/bib95657.pdf>

3.7 Staffing/Departmental Workplace Considerations:

Should the Regional Board resolve to provide the public with a 'Notice of Permit' staff will prepare the notification and publish it in the Salmo edition of the Pennywise, pursuant to Section 494 of the Local Government Act as cited in Section 3.2 of this report.

3.8 Board Strategic Plan/Priorities Considerations:

Not applicable.

SECTION 4: OPTIONS & PROS / CONS

Planning Discussion:

Staff have reviewed the Temporary Use Permit application and conducted a site visit. Staff recommend supporting the application for the following reasons:

- The applicant has provided a detailed management plan which considers the potential social and environmental impacts of the application and outlines strategies to mitigate them.
- The site visit revealed that the land to be mined has already been cleared and prepared for aggregate extraction (see Figure 3).
- The site visit also revealed that Boulder Creek is a significant distance away from the mine site and that Boulder Creek road acts as a berm between the mine site and the creek.
- During the site visit machinery was operating on site and staff can appreciate that such large machinery can not transport large volumes of timber on a slope, therefore it is understandable how levelling more area will increase efficiency of operations and safety on site.
- Section 9 of Electoral Area 'G' Official Community Plan notes the importance of aggregate extraction in the area and supports the use subject to environmental and social sensitivity of the operations.

- The site is located well away from residences, and is naturally buffered by the forested area upslope.
- No public feedback was received during the referral period indicating that the operations permitted by the TUP issued in 2017 was conducted in an environmentally and socially responsible manner.
- The permit limits hours of operation.
- The operational period is limited to four (4) months.

OPTIONS

Option 1: That the Board direct staff to provide notification of the Board’s intention to consider Temporary Use Permit T210FG-05626.040 application by Porcupine Wood Products for the property located at 8564 Highway 6, Rural Salmo BC and legally described as LOT 1 PLAN NEP4415 DISTRICT LOT 1237 KOOTENAY LAND DISTRICT SUBSIDY LOT 71 (PID 010-362-134) at the next available opportunity.

Option 2: That NO FURTHER ACTION be taken regarding the issuance of Temporary Use Permit T210FG-05626.040 application by Porcupine Wood Products for the property located at 8564 Highway 6, Rural Salmo BC and legally described as LOT 1 PLAN NEP4415 DISTRICT LOT 1237 KOOTENAY LAND DISTRICT SUBSIDY LOT 71 (PID 010-362-134).

Option 3: That the application regarding a Temporary Use Permit T210FG-05626.040 application by Porcupine Wood Products for the property located at 8564 Highway 6, Rural Salmo BC and legally described as LOT 1 PLAN NEP4415 DISTRICT LOT 1237 KOOTENAY LAND DISTRICT SUBSIDY LOT 71 (PID 010-362-134) be referred to the June 2022 Rural Affairs Committee meeting.

SECTION 5: RECOMMENDATIONS

That the Board direct staff to provide notification of the Boards intention to consider Temporary Use Permit T210FG-05626.040 application by Porcupine Wood Products for the property located at 8564 Highway 6, Rural Salmo BC and legally described as LOT 1 PLAN NEP4415 DISTRICT LOT 1237 KOOTENAY LAND DISTRICT SUBSIDY LOT 71 (PID 010-362-134) at the next available opportunity.

Respectfully submitted,
Eileen Senyk

CONCURRENCE

Planning Manager – Nelson Wight	Approved	
General Manager Development and Community Sustainability Services – Sangita Sudan		Approved
Chief Administrative Officer – Stuart Horn	Approved	

ATTACHMENTS:

- Attachment A – Draft Permit**
- Attachment B – Mines Management Plan**
- Attachment C – Land Owner Response**



REGIONAL DISTRICT OF CENTRAL KOOTENAY
TEMPORARY USE PERMIT
Planning File No. T2105G-05626.040

Date: April 25, 2022

Issued pursuant to Section 492 of the *Local Government Act*

TO: Porcupine Wood Products

AGENT: Craig Upper

ADMINISTRATION

1. This Temporary Use Permit (TUP) is issued subject to compliance with all of the bylaws of the Regional District of Central Kootenay (RDCK) applicable thereto, except as specifically authorized by this Permit.
2. The land described shall be developed strictly in accordance with the terms and conditions and provisions of this Temporary Use Permit (TUP), and any plans and specifications attached to this Permit that shall form a part thereof.
3. This Temporary Use Permit (TUP) is not a Building Permit.

APPLICABILITY

4. This TUP is issued for the following purpose: sand and gravel aggregate extraction, screening and processing (crushing and screening of materials) and accessory uses associated with this purpose, subject to the conditions outlined below.
5. This TUP applies to and only to those lands within the RDCK described below, and any and all buildings, structures and other development thereon, substantially in accordance with Schedules '1' and '2':

Address: 8564 Highway 6, Rural Salmo BC

Legal: LOT 1 PLAN NEP4415 DISTRICT LOT 1237 KOOTENAY LAND DISTRICT
SUBSIDY LOT 71 PID (010-362-134)

CONDITIONS

6. This TUP authorizes the following use of the above mentioned lands for a period not to exceed four (4) months from the date of issuance or at the date of expiry;
7. This TUP is issued subject to the following conditions:
 - a. The operation shall not include the construction of any permanent buildings or structures;

- b. The operation will be restricted to aggregate (sand and gravel) extraction and processing (limited to crushing and screening of materials) as per Mines Act Permit G-5-307 and as outlined in this permit;
- c. That all work shall be done in accordance with the management plan entitled: Updated Mine Plan for Boulder Creek Pit Mine Development Period 2020 to 2025
- d. Hours of operation will be between 6:00 am and 6:00 p.m., six days a week (excluding Sundays and holidays), from June 17, 2022 to September 30, 2022;
- e. is understood that this is a limited time period for the purposes of internal improvements on the subject property and that another Temporary Use Permit may be issued at a later date upon completion of works by the proponent;
- f. It is understood and agreed that this Permit does not imply approval for future rezoning of the subject land for the specified industrial use.
- g. The temporary industrial use shall comply with all applicable Regional District of Central Kootenay bylaws except as specifically varied by the terms and conditions of this Permit.
- h. Notice shall be filed in the Land Title Office that the land described herein is subject to this Permit.
- i. The terms of this Permit or any amendment to it are binding on all persons who acquire an interest in the land affected by the Permit.
- j. This Permit does not constitute a business licence.
- k. This Permit shall come into force and take effect upon Board resolution;
- l. This Permit shall expire four (4) months from the date of issuance and is only applicable from the dates of June 17th, 2022 to September 30th, 2022.

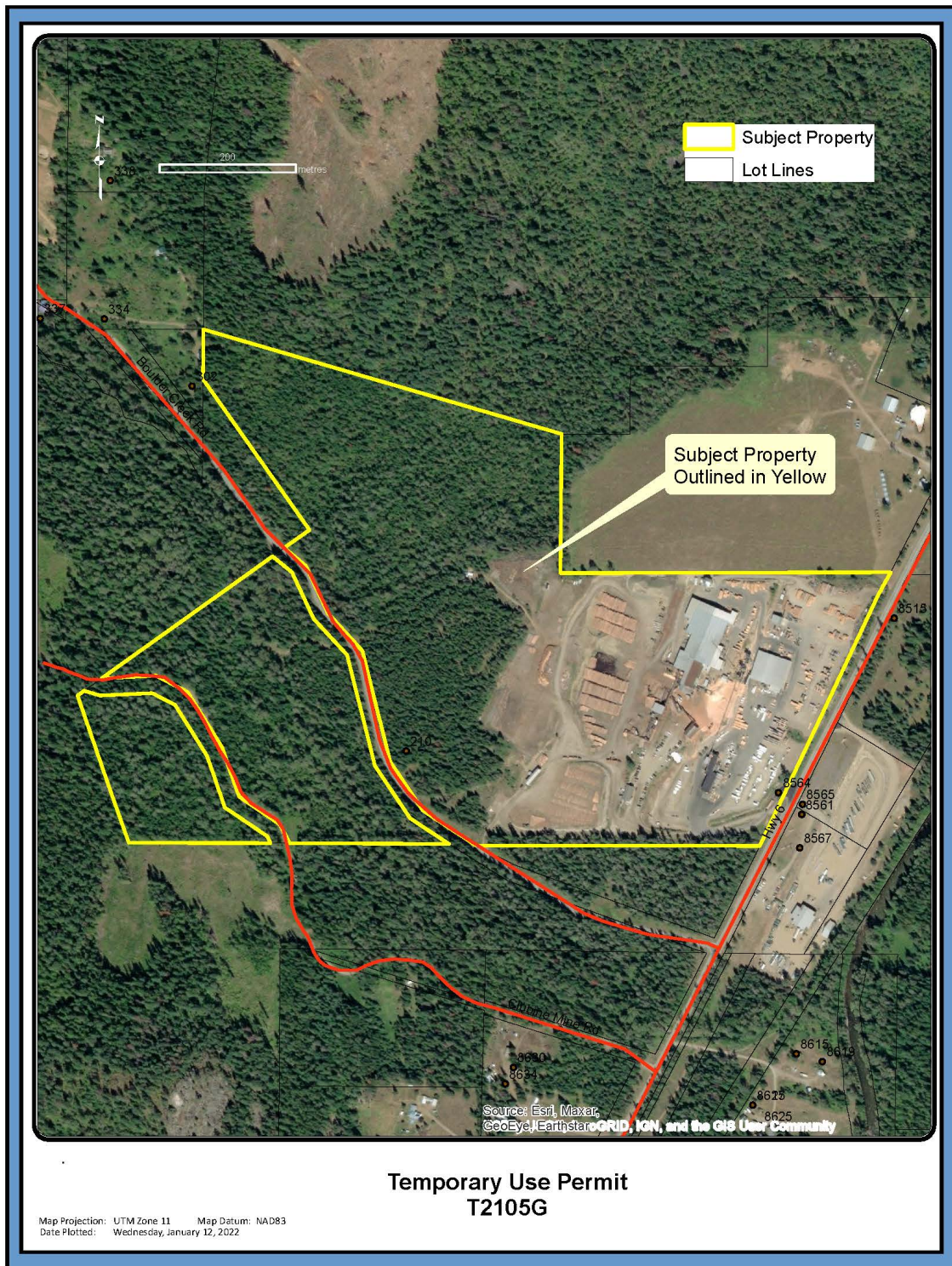
Authorized resolution [*enter resolution number*] passed by the RDCK Board on the day of _____, 20____.

The Corporate Seal of
THE REGIONAL DISTRICT OF CENTRAL KOOTENAY
was hereunto affixed in the presence of:

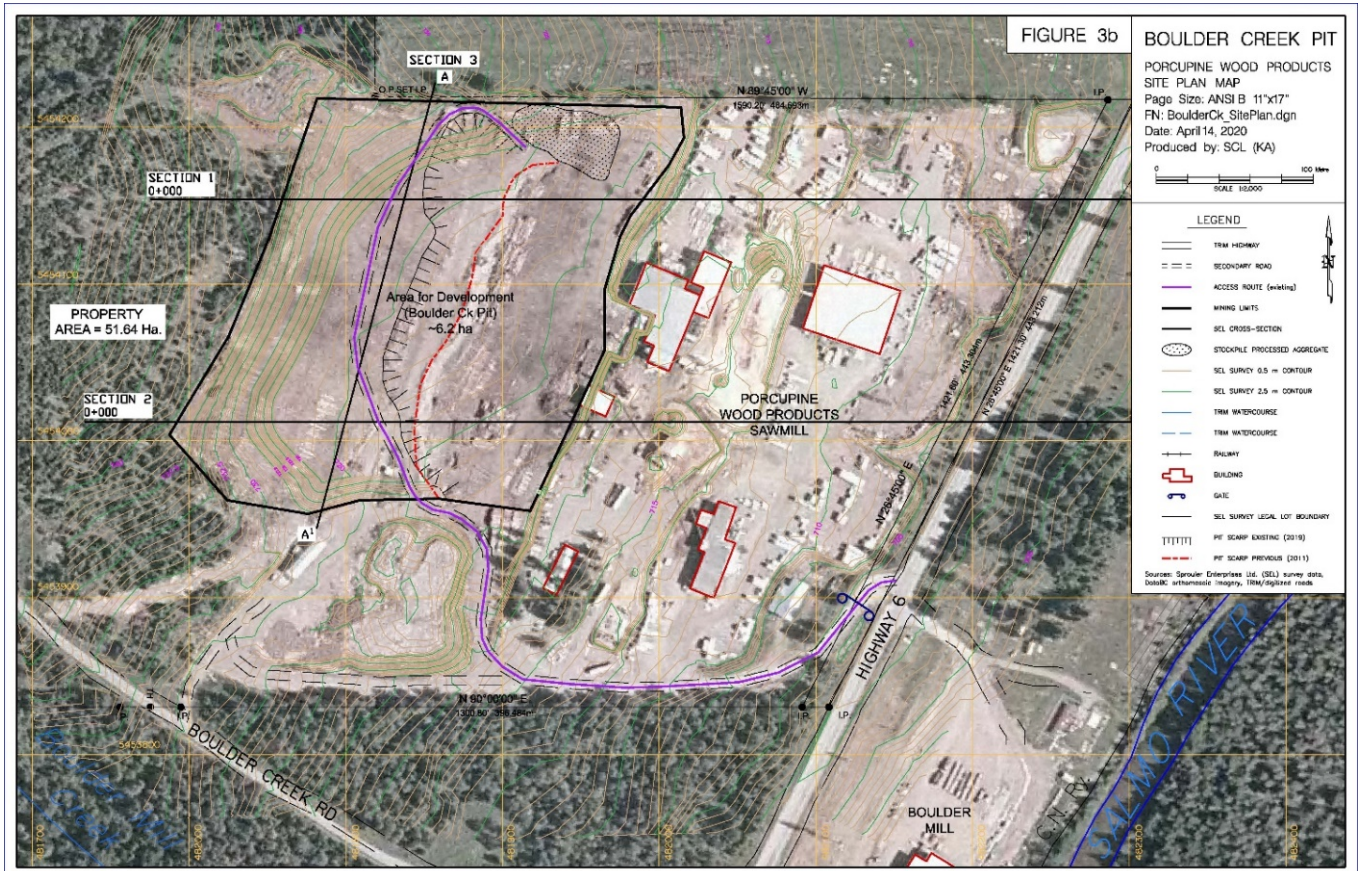
Aimee Watson, Board Chair

Mike Morrison, Corporate Officer

Schedule 1: Subject Property



Schedule 2: Site Plan



Updated Mine Plan for Boulder Creek Pit Mine Development Period 2020 to 2025



Mine No. 1630637

Permit No. G-5-307

May 2020



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Boulder Creek Pit – Updated Mine Plan

For Operating Period 2020 to 2025

1. Introduction

This updated Mine Plan is being submitted by Porcupine Wood Products Ltd. as a requirement of the *Mines Act [RSBC 1996] Chapter 293* and the *Health, Safety and Reclamation Code for Mines in BC, 2017* (HSRC) for the ongoing operations at Boulder Creek Pit, Mine No. 1630637 located near Salmo, B.C. This updated Mine Plan is for the operating period between 2020 to 2025.

Boulder Creek Pit is owned and operated by Porcupine Wood Products for the production of aggregate (sand and gravel) within the privately owned log yard and sawmill operation. It is a smaller pit operation within the existing saw mill and log yard operation, and is managed by Craig Upper, General Manager (contact information is provided at the end of this document).

2. Project Overview

To date, the company has intermittently processed small volumes of aggregate into gravel products over the decade to facilitate the requirement for base material within the log yard facility. Aggregate extraction from the upper bench of the property is required to create a single elevation log yard; presently, approximately half of the log yard is at the desired elevation (aka the middle bench), with the remaining on a higher, sloped elevation due to the existing topography. Developing this one larger leveled log yard will create better efficiencies in operations and safety of personnel operating equipment on site.

At present, the company's internal requirements for aggregate products are minimal; therefore the aggregate volume to be extracted to create a single level log yard needs to be moved offsite. Local supplies of aggregate have become diminished due to limited access to, and lack of remaining viable deposits in the area (e.g. the nearby Ministry of Transportation & Infrastructure's pit [Rotter's Pit no. 0785] located across the highway is exhausted). The source at Boulder Creek Pit can supply the local market with a range of products & material required for various projects in the Salmo and surrounding area for up to 20 years.



3. Location

Boulder Creek Pit is located approximately 4.4 km northeast of Salmo, BC, accessed directly off Highway 6 (just past Boulder Creek Road); refer to Figure 1 - Location Map. It is situated at the toe of a forested slope on the north side of Boulder Creek within a cleared log yard (owned & operated by Porcupine Wood Products).

Legal Description: Lot 1, District Lot 1237, Kootenay District, Plan 4415, PID 010-362-134 containing 52 hectares more or less (for log yard and saw mill operations). The gravel pit operation will be approximately 6.2 hectares more or less within the larger property boundary.

Geographic: 49°14'21"N, 117°14'54" W
49.23916°, -117.242483°
UTM Zone 11 481944m N, 5454051m E

4. Present State of Land & Zoning

- Current Land Use:** An operating log yard/ wood processing plant; refer to Figures 2 and 4.
- Topography:** The site is mainly a benched, low angle abandoned fluvial gravel terrace associated with the Salmo River, sloping from NW to SE, on the west side of the river valley.
- Watercourses:** No watercourses within the operational area. Boulder Creek is beyond the property to the south, on the opposite side of Boulder Creek Road. Drainage from the site is not directed towards Boulder Creek. Refer to Figure 5.
- Vegetation:** Site is located within a saw mill and log yard which has been cleared, grubbed, and stripped. Upper perimeter of development area is adjacent to forested slope.
- Soil Texture:** There are no remaining organics overlying the gravel deposit (stockpiled separately for future reclamation of the site). The remaining substrate is a coarse sandy gravel with some fines and significant oversize.
- Zoning:** The pit operates under a Temporary Industrial / Commercial Use Permit with the Regional District of Central Kootenay. The lot is zoned as M2 (medium industrial). Refer to Figure 4.



5. Project Description

Boulder Creek Pit operates seasonally on a supply-&-demand basis due to varying demands for local aggregate, so production varies from year to year. The overall development area is approximately 6.2 ha, which includes the operating pit area for production, area required for storing aggregate products, housing the crusher, and to maintain the working pit face and access roads. Refer to Figures 3.

The following production plan will be followed:

- The production is sand and gravel extraction and processing (excavation of pit run, mechanical screening & crushing), within an existing lumber yard operation.
- The total area of disturbance is approximately 6.2 hectares, while the mining area is smaller due to required working pit faces and reclaimed slopes.
- The site has already been cleared, grubbed and stripped. Topsoil has been stockpiled separately along the upper boundary for future reclamation.
- The pit is in operation on a limited basis during the operating season (typically mid-March to end of November per annum), and only as per supply demands.
- Crushing only occurs every ~4 years based on supply and demand, and takes place over a 3-6 week period (i.e. limited) typically in the late spring (between April to mid-June). Crushing hours of operations are typically between 7:00 am and 7:00 pm, with an 8 day on/4 day off rotation when in operation. Intermittent mechanical screening is done on the property, but no washing occurs on site.
- Since issuance of permit, the crusher has been on site three times (2009, 2013, and 2017) for a total of ~81,000 metric tonnes (~42,190 m³) of processed aggregate. A remaining +/-466,240 metric tonnes (~242,830 m³) of aggregate likely remains across the upper bench (from the original ~285,020 m³ or ~547,240 metric tonnes estimated during the 2011 SEL survey). Refer to Figures 3 and 6.
- An estimated ~20,000 to 50,000 metric tonnes (10,500 m³ to 26,000 m³) of aggregate (sand and gravel) may be processed every four years (each time the crusher is on site, on a supply-&-demand basis). This is an average annual extraction/production volume of 5,000 to 12,500 metric tonnes (~2,600 m³ to 6,500 m³ or ave. 4,550 m³) per year, which fluctuates depending on market supply demands.
- Processed aggregate is stockpiled within the excavated area, mostly along the northern perimeter. Product stockpiles should be sloped at 2:1 in compliance with the Mines Act & HSRC, 2017. For proper stockpile management and safety,



space is required for a range of products and to operate the crusher. Stockpiles may be moved as development progresses within the operating area.

- The height and slope of the working pit face will be in compliance with the Mines Act & HSRC, 2017.
- Prior to transporting the crusher into the site, the equipment will be cleaned.
- Equipment will be selected on its noise output, exhaust configuration, and compatibility with other equipment on site.
- The pit floor will be in-sloped with a 2% grade (away from the log yard buildings downslope) to manage surface runoff from upslope. Where possible, in-pit drainage will be diverted around active work areas. No pit runoff shall be allowed free access to any surface water, as per Ministry of Environment guidelines.
- Fuel will not be stored on site. Any chemical spills will be cleaned up immediately and all contaminated materials disposed of in an appropriate manner. An emergency spill response kit will be on-site during the course of operation.
- Reclamation will occur when excavated areas are no longer required, as per the Mines Act & HSRC, 2017. The end land use is industrial (log yard).

6. Dust Control and Management Plan

It is the company's responsibility to ensure their workforce is not subjected to airborne contaminant levels that exceed specifications within the HSRC 2017 for Mines in BC. The purpose of the Boulder Creek Pit Dust Control Plan is to identify, implement and monitor the application of Best Management Practices (BMPs) to help reduce the fugitive dust and small particle dust related to the industrial activities at Boulder Ck Pit and the potential impacts on the neighbouring residential areas.

The plan includes activity-specific dust control criteria and dust suppression procedures. BMPs will be implemented throughout the industrial operations on an as-needed basis; this depends on the activity and the agency oversight.

6.1 Best Management Practices

Proactive controls will be instituted at Boulder Ck Pit to reduce the amount of dust generation during any site activities. The following Boulder Ck Pit process, operations or equipment have the potential to emit dust (refer to Figure 3 - Site Plan):

1. Haul roads (vehicle traffic)
2. Stockpile area(s)



3. Transfer points (drops)
4. Processing (crushing, screening, etc.)
5. Extraction (process)
6. Disturbed areas (though these are not a concern with regards to exposed fines or sands due to the coarse nature of the aggregate deposit, as well as the operational lumber yard utilizing cleared areas for log storage, etc.)

Best Management Practices (BMPs) represent the current 'state of practice' approach to manage dust impacts and effects, and at Boulder Ck Pit include, but are not limited to:

- Limit surface areas disturbed, limit work in the wind thresholds greater than 20 km/hour, apply suppressant as needed, and clean up spills immediately;
- Reduce speed limits;
- All trucks leaving the site will be covered by a tarp;
- Placement of the crusher will be in the bottom of the pit;
- Crushers will be equipped with effective water sprays;
- Areas not being mined or used for stockpiling are part of the operational lumber yard and used for log storage, etc.;
- A maximum material drop height is not to exceed 1 meter, minimize where possible and should use chutes;
- In cases of a wind event or extreme heat and should the referenced measures be inadequate, operations will stop until the dust is managed effectively. This is described in Section 6.4.3;
- All personnel will be notified of the Dust Control Plan.

Refer to Table 1 in Section 6.2 for recommended BMPs specific to Boulder Ck Pit.



6.2 Site Specific Mitigation and Control Methods

In order to achieve an effective operational dust control plan at Boulder Ck Pit, site specific mitigation measures and BMPs have been prescribed to address specific dust generating sources and activities.

Table 1 - Monitoring, Mitigation & Control Methods

Source	Monitoring	Methods for Management & Mitigation (based on BMPs)	Materials & Equipment Needed
Vehicle Traffic (access / haul roads within Boulder Ck Pit)	Visual inspection for dusty conditions shall occur at a minimum of twice daily.	<ul style="list-style-type: none"> • Water roads when conditions warrant. • Wheel washer. • Wash down trucks. • Pave high use areas, where possible. • Speed within mine site to be less than 30 km/hr. • Post km/hr signage indicating dust control. • Limit work on windy days. 	<ul style="list-style-type: none"> • Water truck. • Signage.
Stockpile areas (aggregate, topsoil/overburden)	Visual inspections shall be carried out during crushing operations or hauling.	<ul style="list-style-type: none"> • Treat stockpiles. Note: overburden stockpiles (stripped years ago) have been seeded with local native grass mix to reduce dust and prevent noxious weeds. • Minimized stockpiling. 	<ul style="list-style-type: none"> • Local native grass seed mix.
Drops (at transfer stations)	Should be monitored hourly when there is dry weather and winds are anticipated to be blowing towards residential areas (north).	<ul style="list-style-type: none"> • Limit work on windy days. • Install chutes at drop points~. • Maximum dump heights not to exceed 1 m, minimize where possible and could use chutes~. • Enclosing transfer points along conveying circuits where dust may be created and apply sprays. 	<ul style="list-style-type: none"> • Chutes; ~only to be used if they do not impede view for the tower and loader operators to view (for safety and efficiency reasons).
Processing (feeds and discharges for conveyors, crushers, screens, etc.)	Should be monitored hourly when there is dry weather and winds are anticipated to be blowing towards residential areas	<ul style="list-style-type: none"> • Spray bars on crushers and conveyors (wet dust suppression system); watering rate set as needed. • Screenings (limited high-fine materials at this site): terminal stacking conveyor appropriate for 	<ul style="list-style-type: none"> • *Spray bars with nozzles on critical areas of the crusher • Terminal stacking conveyor

	(east).	this site, to be kept as close to the ground (~4 to 5 m so the loader can access the surge pile to fill the bucket and transport to the stockpile) or tops of stockpiles (drop height of 1 m or less).	
Excavation (working pit face, berm construction, rehabilitation)	Should be monitored hourly when there is dry weather and winds are anticipated to be blowing towards residential areas (north).	<ul style="list-style-type: none"> • Avoid berm construction during dry months. • Passive dust suppression - no operations on hot, windy days. • Progressive reclamation; re-sloping mined out pit faces (end use is industrial so re-vegetation or cover is not applicable at this site). 	<ul style="list-style-type: none"> • Weather forecast. • Visual monitoring.
Weather and dust events	Refer to text below [^] .		

⁺Water sprays:

1. Adjust nozzles so that the spray is directed to dust generating areas to provide complete coverage.
2. Locate nozzles upstream of dust generation points and close enough so that the spray is not carried away by wind.
3. Ensure the volume and size of droplets are adequate to sufficiently wet the material (optimal droplet size is 10-150 µm).
4. Time water spray application to ensure the materials are still damp when they are disturbed
5. Dust suppressants (other than water) are not required at this site due to <low fines content.

[^]Weather and dust events create significant hazards to the control of dust management, and it may be that these events superseded the normal dust control methods in Table 1. At certain thresholds (including those climatic conditions listed in Section 4.3), pit activities that are producing visible dust and impacting neighbours should be halted or ceased (with a plan to ensure stockpiles are protected), especially when mitigation techniques are no longer appropriate or effective. Dust events and the required actions are to be recorded (as per Table 2 in Section 4.4).



The Mine Manager must ensure that wherever practicable, water sprays or other dust suppression means and devices are used at every dusty place where work is carried out and where it is impracticable to do so, personal protective equipment shall be supplied and worn by all persons working in that location, as per the HSRC 2017 for Mining, Section 6.24.2.

All personnel will be trained on procedures to reduce dust within this operation.

6.3 Prevention

Prevention or reduction of the amount of dust generation during site activities can be achieved through proactive controls including, but not limited to:

- Limiting surface disturbance;
- Enforcement of low speed limits for vehicle traffic;
- Decontamination of trucks leaving work areas;
- Covering of truck loads leaving the facility;
- Height limits for gravel stockpiles;
- Wetting active areas;
- Spraying conveyors and stockpiles;
- Minimizing drop heights;
- Minimizing or ceasing dust generating activity during periods of high wind;
- Wetting unpaved areas;
- Application of dust suppressants;
- Establishing/maintaining vegetative or other groundcover.

6.4 DUST CONTROL PLAN IMPLEMENTATION

6.4.1 Roles and Responsibilities

While not all site personnel will be directly involved in implementation of the plan, all site personnel should be aware that the plan exists and to contact the Mine Manager in the event that they observe a potential dust concern during the course of their regular activities. Training in this regard should occur to introduce new employees and contractors to the plan and to refresh all employees/contractors regularly.

The Mine Manager will delegate staff to be responsible for the monitoring and management of the dust control. The Mine Manager will determine the frequency of monitoring procedures to be put in place based on triggers for potential dust sources: such as seasonal (e.g. dry) or operational (e.g. crusher on site) conditions, and using BMPs as a guide.

The Mine Manager is responsible for reviewing this DCP on a seasonal basis for consistency and relevancy, if there is a significant operational change, or if reviews or inspections indicate that dust management practices do not meet requirements.

6.4.2 Monitoring

Monitoring will be on the onus of the Mine Manager and should include:

- Visual inspection for dusty conditions shall occur at a minimum of twice daily;
- Visual inspections shall be carried out hourly during berm construction or rehabilitation;
- Inspection of dust controls functioning properly, such as watering and if chutes are effective;
- Excavation and loading operations should be monitored hourly when there is dry weather and winds are anticipated to be blowing towards residential areas;
- Site manager or delegate will be responsible for monitoring current conditions and weather forecasts from Environment Canada, to subsequently help plan for current and next day watering needs and other measures;
- Records regarding when and how dust control measures are implemented must be kept on site. These records must include and not be limited to: watering on roads, visible dust observed, meteorological conditions for that day.

6.4.3 Triggers for Dust Management Mitigation

Visual cues will be the primary trigger for mitigation action to be taken. Typical triggers of employing dust control measures would be:

- If material handling activities are occurring that may impact air quality beyond the property boundary;
- If visible dust is being generated beyond the property boundary by material handling activities, and/or stockpiles;
- If the weather forecast indicates dry conditions and strong winds are likely.

In addition to specific site features which may generate fugitive dust, consideration should also be given to specific climatic conditions which cause dust. These conditions or unusual weather or dust events can include, but not be limited to:

- Temperatures over 30 degrees Celsius;
- Consistent wind speeds over 30 km/hour;
- Temperature inversions and/or cloud cover creating poor air quality.

6.4.4 Record Keeping

The following tables are to be used for record keeping and include a record of dust events and responses (Table 2), and a complaint tracking tool (Table 3).



Table 2 - Dust Events and Response:

Date	Name (staff member responsible)	Dust Event (details; time, source, weather, etc.)	Mitigation and Response (details)

Table 3 - Complaint Tracking Tool:

Date	Source of complaint (name, organization, contact details, etc.)	Complaint specifics (who took the complaint, what was the issue, what was done, follow up, etc.)

7. Noise Management Plan

It is the company’s responsibility to ensure their workforce is not subjected to noise levels that exceed specifications within the Health, Safety & Reclamation Code for Mines in BC.

The following noise control plan will be followed:

- Well maintained access roads;
- 30 km/hr speed limit within the pit area;
- Placement of the crusher in the bottom of the pit;
- Hours of pit operations will be between 7 am and 7 pm, seven days a week (as part of the lumber yard operations), from mid-April to late November per



- annum; the pit is in only in operation on a limited basis during the operating season and only as per supply demands.
- Crusher will only be brought on site intermittently (every ~4 years based on supply and demand, over a 3-6 week period typically in the late spring (between April to mid-June). Crushing hours of operations are typically between 7:00 am and 7:00 pm, with an 8 day on/4 day off rotation.
 - A maximum drop height of 2 meters for loading trucks;
 - Equipment will be selected on its noise output, exhaust configuration, and compatibility with other equipment on site;
 - All equipment used on the site will have functional mufflers that are in good working order and muffle noise to their full capacity.
 - Operation will abide by any applicable additional guidelines outlined in the BC Aggregate Operators Best Management Practices Handbook.

All personnel will be trained on procedures to reduce noise within this operation.

8. Transportation of Aggregate to Market

The following Transportation Plan will be followed:

- Well maintained access roads;
- 30 km/hr speed limit will be maintained within the pit area;
- All trucks leaving the site will be covered with a tarp;
- Hours of operations will be between 7 am and 7 pm, seven days a week (as part of the lumber yard operations), from mid-April to late November per annum; the pit is in operation on a limited basis during the operating season and only as per supply demands.
- Crusher will only be brought on site intermittently (every ~4 years based on supply and demand, over a 3-6 week period typically in the late spring (between April to mid-June). Crushing hours of operations are typically between 7:00 am and 7:00 pm, with an 8 day on/4 day off rotation.
- Equipment will be selected on its noise output, exhaust configuration, and compatibility with other equipment on site;
- All drivers will be qualified and experienced;
- All trucks and equipment will undergo frequent safety inspections and be in good working conditions;
- No overloaded trucks will be allowed to leave the operation;
- All trucks will abide by all traffic regulations;



- Truck drivers who are repeat offenders of these guidelines will have their access to the pit denied.

All personnel will be trained on procedures of the Transportation Plan within this operation and to the end aggregate user.

9. Water & Environment

No existing watercourses run through or directly adjacent to the site. The gravel pit excavation, at its closest border, is approximately 150 m to the centre line of Boulder Creek Road, and from this centre line to the closest stream bank of Boulder Creek is another 60 meters to the south (refer to Figures 1 and 5). Boulder Creek, tributary to Salmo Creek, has been classified as fish bearing with a mapped fish point near the culvert crossing under Highway 6 (on the west side, source: iMapBC 1995 observation); however, this section of the creek is known to run dry during the peak summer months (Craig Uppers, pers. comm. Spring 2012). The creek is classified as S3 with a stream length of 5.49 km (source: Habitat Wizard), and the creek channel at the elevation of the area of development can be described as a mountain stream with little to no vegetation in the channel, generally steep banks, trees and brush along banks are submerged at high stage of flow, and the creek channel has a bottom of gravel, cobbles, and few boulders.

Drainage from the site does not flow towards Boulder Creek, and seasonal surface runoff occurring above the pit will be collected at the base of the pit face which will be in-sloped with a 2% grade (away from the log yard buildings down slope). Similar drainage has been in place within the middle bench of the log yard for many years; during the spring runoff pooling water is collected here with natural drainage into the underlying substrate of sand & gravel, otherwise conditions become dry for the remainder of the operating season. Where possible, in-pit drainage will be diverted around active work areas.

Groundwater was not encountered during July 2012 test pit sampling of the upper bench intended for gravel extraction, following the wettest month in recorded history in the Kootenays. Based on local well logs, the average depth to groundwater is approximately 30 feet (refer to Figure 5).

The gravel pit excavation will take place within the existing cleared land of the operating log yard; the footprint of development will not be increased by the development.

Water quality & consumption

At present, Porcupine Wood Products has an existing water licence (#C123777) drawn from Boulder Creek via a point-of-diversion (PD28606), which allows a



consumption rate of 37,800 gallons per day per annum (refer to Figures 5). The existing wood processing facilities uses approximately 5,000 gallons per day for the peak operating periods (i.e. the summer months), which drops down to approximately 2,000 gallons per day during the winter months. The excess volume of water not used by the operation remains in the Boulder Creek watercourse. The use of water in the screening process of aggregate, as needed for Boulder Creek Pit, is minimal and only required for dust control measures. Therefore, the aggregate pit operation will not be a large draw on water consumption, and in combination with the wood processing usage, the company is still far from their daily allowance.

A second water intake from Boulder Creek (PD 28608, licence #C070639) is situated above the mining area, and runs above the site towards the north, heading downslope towards the neighbouring property for irrigation purposes. This water source and associated water works would not be disturbed by any of the pit operations, as it is situated upslope and/or beyond the natural flow of any surface runoff from the gravel pit operation. The same applies to the surrounding domestic water wells at similar elevations (shown on Figure 5).

One licenced domestic well is located below the highway (tag no. 90289) downslope of the Porcupine Wood Products log yard. An existing ditch on the uphill side of the highway captures any surface drainage from the lower log yard, carrying it to the nearest low point (Boulder Creek Rd. – which runs underneath the highway to the Salmo River via a concrete cross drain; note: this crossing runs dry by mid-summer). Based on the well logs database (ministry of Environment, Wells database), the static level of water in this 57 foot deep well is approximately 37 feet depth which would indicate it draws from the Salmo River. Based on these factors, and the pit drainage in place for surface runoff, the gravel pit operation is not expected to contribute any additional surface runoff to the lower operating area, and therefore this domestic water source quality should be maintained.

Boulder Creek is deemed not suitable for consumption by Interior Health, and has been on a boil water advisory since year 2000. Presently, the company uses a bottled water dispensing system throughout the entire facility where all employees require drinking water. This policy has been adopted for the gravel pit operations.

No pit runoff shall be allowed free access to any surface water, as per Ministry of Environment guidelines.

10. Reclamation Plan

The aggregate operation on this site is a temporary activity (5 to 20 years), to create one larger leveled log yard for the Porcupine Wood Products operations. Therefore, reclamation is not scheduled to occur upon completion of the aggregate extraction, but will be done in accordance with the log yard operations. The pit faces will be



reclaimed as per Ministry of Natural Resource Operations – Mining & Minerals regulations.

a. End Land Use

- The surface of the land will be used as an operational log yard.

b. Productivity

- The level of land productivity on the reclaimed area will not be less than what existed prior to mining, and will actually increase the efficiencies of the log yard operations as well as the safety of personnel operating heavy equipment on site.

c. Re-vegetation

- At the completion of mining, all slopes shall be trimmed to a consistent, slope of 2:1, or the natural slope angle with native granular material.
- Topsoil and overburden from the previously cleared site has been stockpiled for future reclamation purposes (to be spread evenly over the disturbed areas, and the land will be re-vegetated to a self-sustaining state using appropriate plant species).

d. Watercourses

- No existing watercourses run through the site, and will therefore not be disturbed during production. (Refer to section above.)
- No pit runoff shall be allowed free access to any surface water, as per Ministry of Environment guidelines.
- Surface drainage will be restored to the back of the new pit floor (in sloped at ~2% grade) and will be managed as needed.

e. Roads

- All internal roads will be maintained or reclaimed in accordance with the land use objectives (log yard operations).

11. Safety

Operations will be in compliance with the Mines Act & HSRC, 2017 including proper signage, sloping, gate, berms, and Personal Protective Equipment (PPE). The manager requires that persons wear effective PPE in any situation where control at the source is impractical. The mine manager shall ensure no material or equipment shall be placed, stacked, or stored as to constitute a hazard to persons.



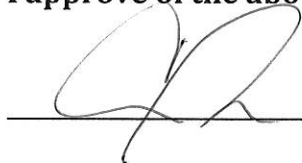
A Mine Emergency Response Plan for Boulder Pit has been written to fulfill the requirements of the HSRC 2017 (refer to Appendix B). It provides key officials, contractors, and employees within the mining operation with a general guideline to the initial response to an emergency, and an overview of their responsibilities during an emergency.

An effective and comprehensive safety program is in place for the saw mill and log yard operation for any staff, contractors and operators on site (refer to PWP Emergency Procedures Appendix C), with an additional form for gravel pit operation activities. There is a designated first aid building on site (Reman building; refer to Site Plan in MERP), and first aid info and a site map are posted at the Weigh Scale Building near the saw mill entrance, and are handed out to workers entering the gravel pit.

There are gates at the two entrances to the saw mill operating area (off Highway 6 and Boulder Creek Road), with private internal road and appropriate signage warning the public of industrial activities including “No Unauthorized Persons Allowed On Site”.

12. CLOSURE

I approve of the above written procedures and updated Mine Plan.



Date: MAY 18, 2020

Craig Upper, Mine Manager of Boulder Pit
General Manager of Porcupine Wood Products, Salmo, B.C.
Email: craigupper@porcupinewood.com
Phone: 250-357-9479 extension 206
Cell: 250-354-9233



13. REFERENCES

- Regional District of Central Kootenay Planning Department Bylaws (Electoral Area G);
- Ministry of Environment’s Habitat Wizard mapping application;
- GoogleEarth orthomosaic imagery;
- iMapBC web mapping application;
- Ministry of Energy and Mines BC Geological Survey Digital Geology Map;
- Ministry of Energy and Mines *Aggregate Operators Best Management Practices Handbook for British Columbia*, Volume II, April 2002;
- Ministry of Energy & Mines, *Health, Safety and Reclamation Code for Mines in British Columbia*, 2017;
- Ministry of Environment Water Stewardship Division Wells Database;
- Ministry of Environment Water Licenses Query.



- b. The operation will be restricted to aggregate (sand and gravel) extraction and processing (limited to crushing and screening of materials) as per Mines Act Permit G-5-307 and as outlined in this permit;
- c. That all work shall be done in accordance with the management plan entitled: Updated Mine Plan for Boulder Creek Pit Mine Development Period 2020 to 2025
- d. Hours of operation will be between 6:00 am and 6:00 p.m., six days a week (excluding Sundays and holidays), from June 17, 2022 to September 30, 2022;
- e. is understood that this is a limited time period for the purposes of internal improvements on the subject property and that another Temporary Use Permit may be issued at a later date upon completion of works by the proponent;
- f. It is understood and agreed that this Permit does not imply approval for future rezoning of the subject land for the specified industrial use.
- g. The temporary industrial use shall comply with all applicable Regional District of Central Kootenay bylaws except as specifically varied by the terms and conditions of this Permit.
- h. Notice shall be filed in the Land Title Office that the land described herein is subject to this Permit.
- i. The terms of this Permit or any amendment to it are binding on all persons who acquire an interest in the land affected by the Permit.
- j. This Permit does not constitute a business licence.
- k. This Permit shall come into force and take effect upon Board resolution;
- l. This Permit shall expire four (4) months from the date of issuance and is only applicable from the dates of June 17th, 2022 to September 30th, 2022.

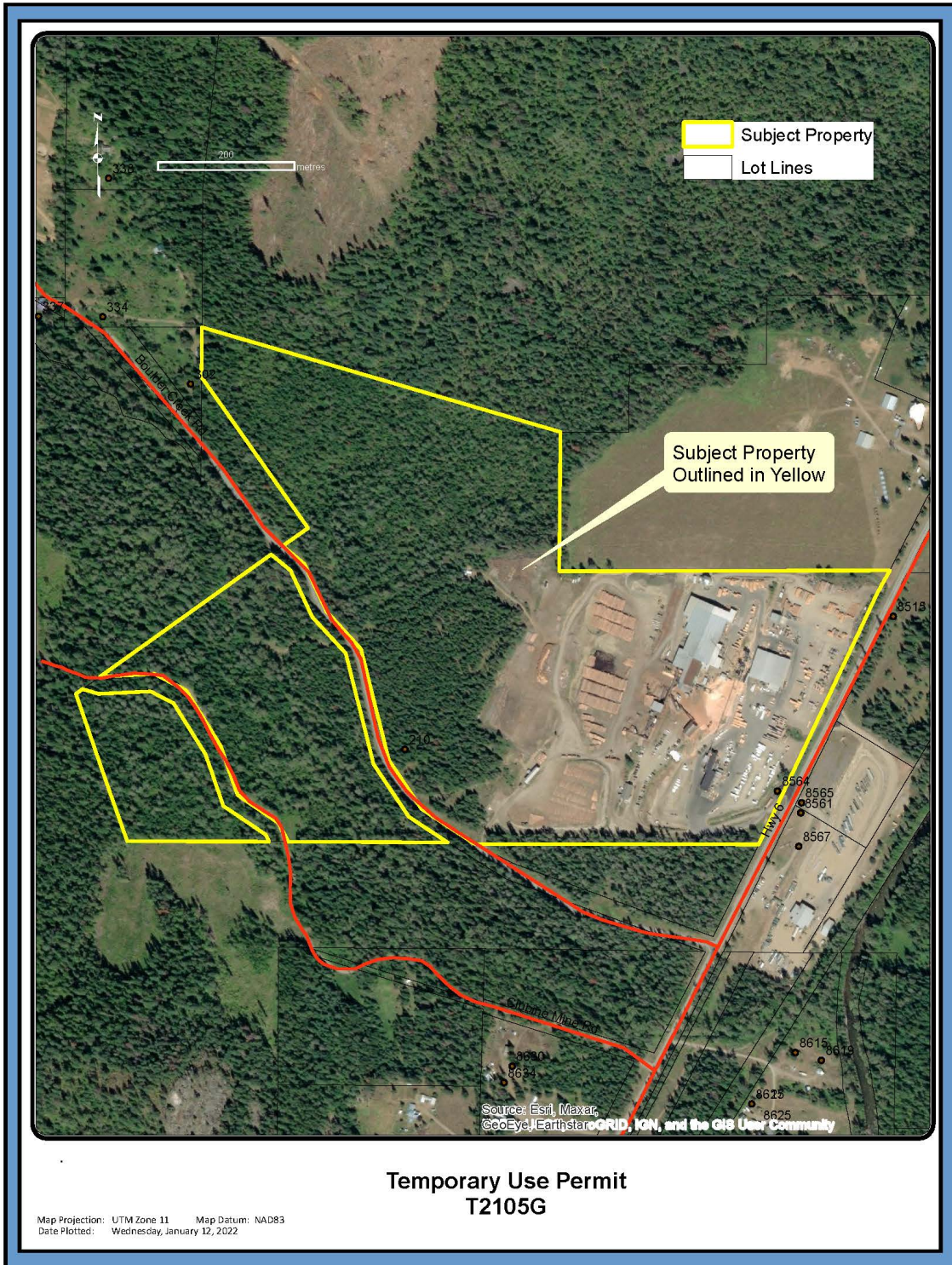
Authorized resolution [*enter resolution number*] passed by the RDCK Board on the day of _____, 20____.

The Corporate Seal of
THE REGIONAL DISTRICT OF CENTRAL KOOTENAY
was hereunto affixed in the presence of:

Aimee Watson, Board Chair

Mike Morrison, Corporate Officer

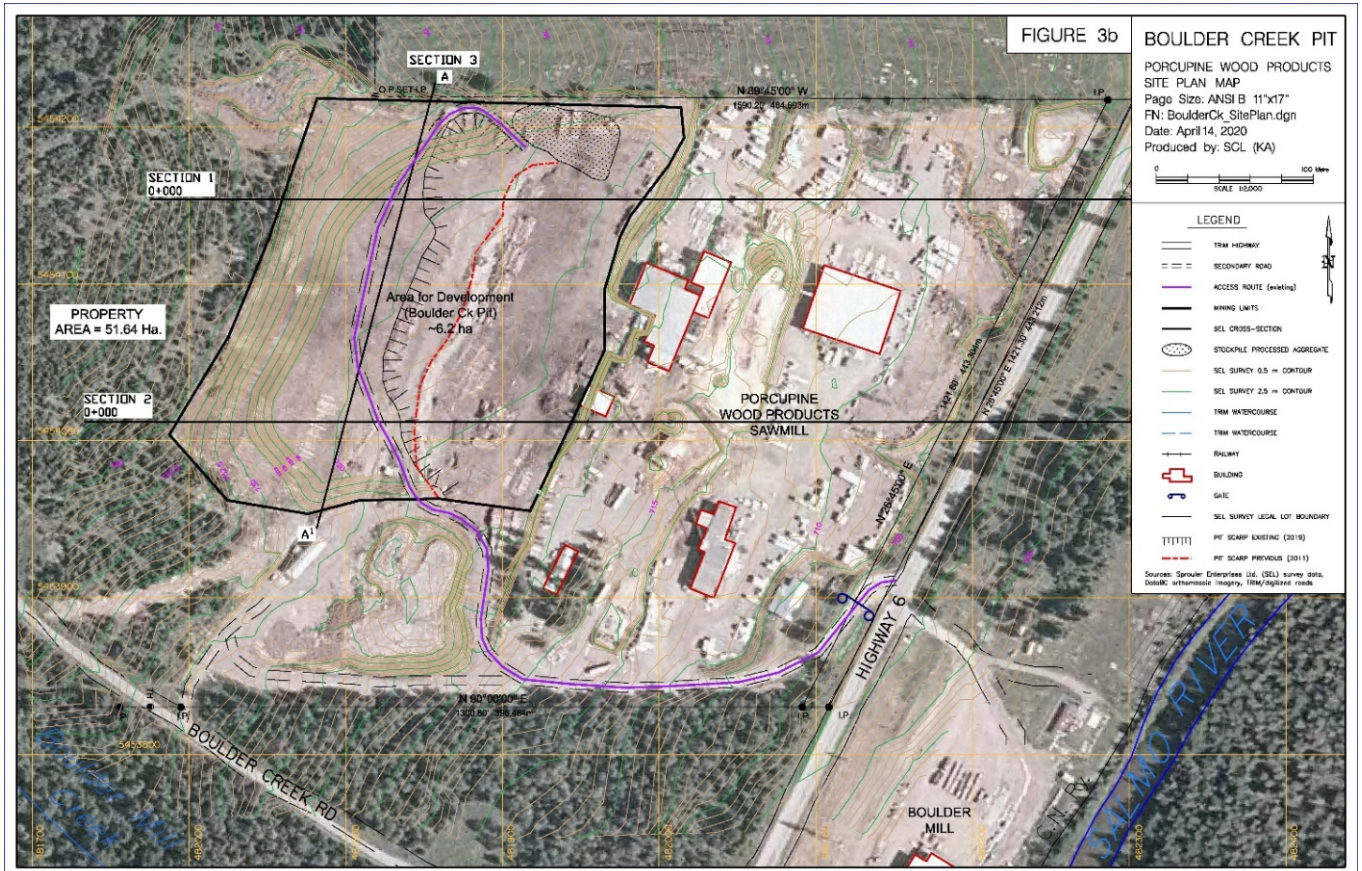
Schedule 1: Subject Property



Temporary Use Permit
T2105G

Map Projection: UTM Zone 11 Map Datum: NAD83
Date Plotted: Wednesday, January 12, 2022

Schedule 2: Site Plan



Alice & Gerry Nellestijn
203 Boulder Pit Road
Salmo, BC V0G 1Z0

April 15, 2022

Re: Porcupine Wood Products proposed Temporary Use Permit – T2105G

Regional District of Central Kootenay
Box 590
202 Lakeside Drive
Nelson, BC V1L 5R4
Email: esenyk@rdck.bc.ca

Dear Ms. Senyk,

Porcupine Wood Products has proposed to pursue a Temporary Use Permit to extract aggregate, and to “process” it on-site, which means crushing rock. Although temporary, this process heavily impacts the neighbourhood, with extra noise, dust and traffic. This is especially bothersome with the hours they are seeking to have approved, virtually guaranteeing that the neighbourhood will not be able to achieve quiet enjoyment of our properties. They are also proposing to stockpile the gravel onsite, to sell over a period of time, continuing to add extra noise, dust, and traffic to the area.

Porcupine Wood Products are not responsible corporate citizens. They do not adhere to the by-laws that are in place, constantly filling the neighbourhood with excessive noise and particulate matter. Recently, I washed the outdoor table, which is six metres from my kitchen window. Three days later, from inside the house, I was able to clearly read the word “HELP” that Gerry had written in the sawdust (particulate matter from the millsite) on the table.

Whenever they are permitted to burn slash, they ensure that they do so on a long weekend to ensure that MOE staff are unable to respond to the excessive smoke that continues past permitted use dates, or to avoid business hour complaints.

If this Temporary Use Permit is granted, we would prefer that Porcupine Wood Products are only allowed to extract and process aggregate from 9 am to 5 pm, Monday through Friday.

It’s time that Porcupine start benefiting their neighbours, instead of constantly impacting the peace and quiet and air quality.

Regards,
Alice & Gerry Nellestijn
Tel: 250-357-2630