



REGIONAL DISTRICT OF BULKLEY-NECHAKO
PLANNING DEPARTMENT REFERRAL REPORT
FILE No. RZ A-01-21

Written by Jason Llewellyn, Director of Planning and Development

APPLICATION SUMMARY

Name of Agent / Owner: Dan Farmer (Telkwa Mining Ltd.)

Electoral Area: A (Smithers / Telkwa Rural)

Subject Property: 14544 Lawson Road legally described as Lot A (See DF 18988), District Lot 1143, Range 5, Coast District, Plan 1056, Except Plan 9828

Property Size: 60.7 hectares (150.76 ac.)

OCP Designation: **Agriculture (AG)** in "Smithers Telkwa Rural Official Community Plan Bylaw No. 1704, 2014" (the OCP).

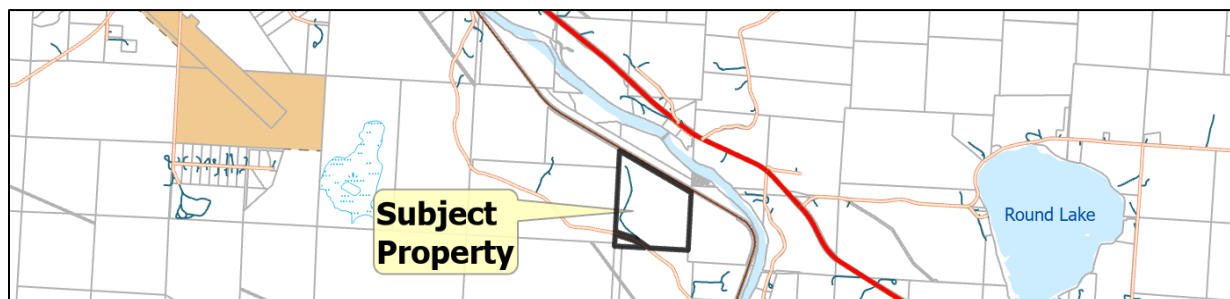
Zoning: **Agricultural (Ag1)** in "Regional District of Bulkley-Nechako Zoning Bylaw No. 1800, 2020" (the Zoning Bylaw).

ALR Status: In the ALR

Existing Land Use: Agriculture

Location: The subject property is located at 14544 Lawson Road, approximately 5 km from the Village of Telkwa.

The subject property contains a single-family dwelling, garage, large shop, water wells, septic field, two small storage sheds and agricultural fields.

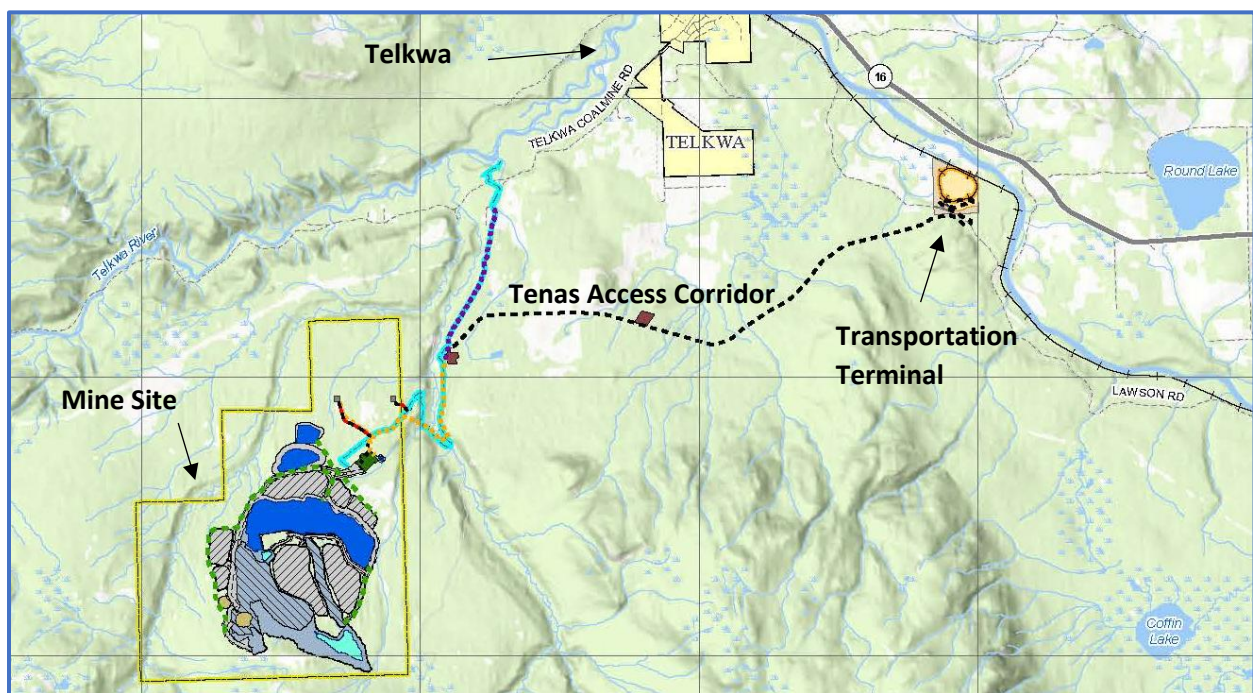


Proposed OCP Amendment and Rezoning

The applicant is proposing to do the following:

1. amend the OCP designation for the subject property from Agriculture to Industrial; and
2. amend the Zoning Bylaw by rezoning the subject property from the Agricultural (Ag1) Zone to the Light Industrial (M1) Zone.

The purpose of the OCP amendment and rezoning is to allow the subject property to be used as a Transportation Terminal. This facility includes a 2.13 km rail loop connected to CN Rail's main track by a 0.34 km rail spur.



This Transportation Terminal is in support of a proposed surface metallurgical coal mine (Tenas Project) located approximately 10 km southwest of the Village of Telkwa.

The proposed mine is anticipated to produce between 775,000 to 825,000 tonnes of washed coal annually. The mine life is approximately 25 years, including construction, operation, and reclamation phases. The mine site is accessed by Telkwa Coalmine Road. An 11 km long haul road, referred to as the Tenas Access Corridor (TAC), is proposed between the mine site and the proposed Transportation Terminal on Lawson Road. This project, including the Transportation Terminal is currently going through the Provincial Environmental Assessment Certificate review process.

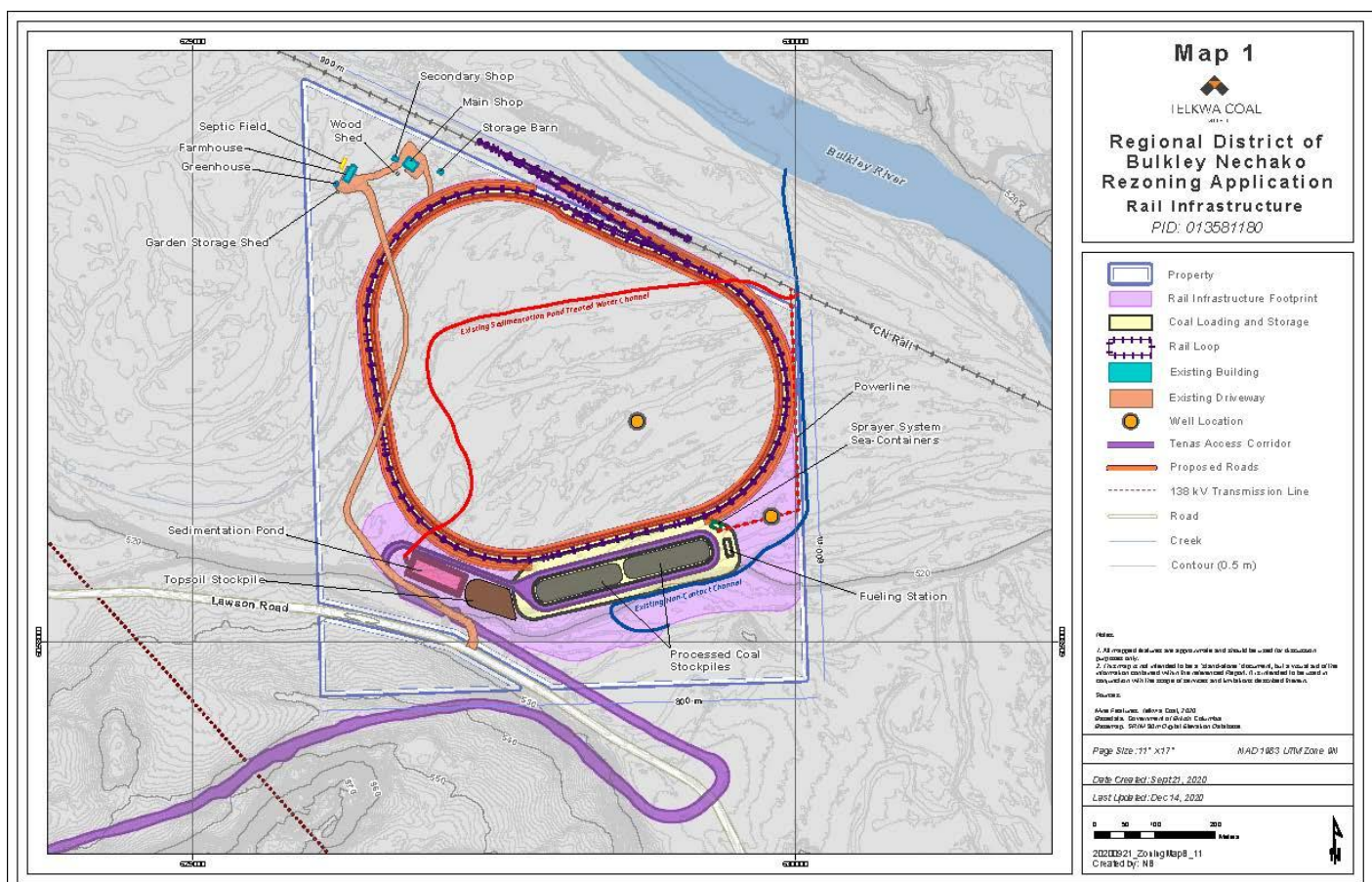
THE PROPOSED TRANSPORTATION TERMINAL FACILITY AND OPERATIONS

The small portion of land not proposed to be used by the Transportation Terminal may be leased to a farmer if there is interest. The dwelling may be converted for office use (building permit required) and the accessory buildings may be used for equipment and vehicle storage.

An existing groundwater well will supply the 24,000 m³ of water that may be used by the Transportation Terminal operations annually. This includes water required for the dust management system. There is an existing septic system on site which the applicant has indicated is sufficient for the proposed use and number of users.

Coal trucks will transport processed coal from the mine site to the stockpile pad at the proposed facility. Front end loaders will be used to stack the processed coal into two 15,000 tonne stockpiles. Each truck will have an approximate payload of 60 tonnes.

Based on the anticipated mine production it is estimated that there will be between 12,900 and 13,750 truck trips between the mine site and loadout facility annually. This is approximately 1.6 trucks per hour delivering coal to the Transportation Terminal, and a total of 3 to 5 trucks an hour travelling both directions along the designated Tenas Access Corridor, loaded and empty.



The two stockpiles will have a combined capacity of 30,000 tonnes, which is equivalent to roughly 2.5 trains. Based on an average rail car capacity of 105.5 tonnes per car and the production requirements, 63 to 68 trains per year are required. This is approximately 1.25 trains per week. Front end loaders will be used to load coal from the stockpiles into rail cars.

The facility is expected to operate 365 days a year and 24 hours a day. Stockpile handling and train loading are planned for daytime operation. However, the facility may operate at night depending on operational requirements.

During the colder months, an anti-freeze solution will be applied to the empty rail cars prior to filling to prevent coal freezing and sticking to the rail car during unloading at the port. The anti-freeze agent will be delivered to the mine site by road tanker and will be stored in a 40,000 litre storage tank. The tank will be heated and insulated as the solution can become difficult to pump at below zero temperatures. The rail car dosing system will have dosing pumps and equipment supplied within a self-contained and heated container.



SOCIO-ECONOMIC MANAGEMENT PLAN (SEMP)

The property is undergoing the Provincial Environmental Assessment (EA) review process pursuant to the *Environmental Assessment Act*. Planning Department staff are participants on the working group advising the Province on the review process and are reporting to the RDBN Board of Directors as appropriate.

The EA review process includes a review of the environmental and socio-economic impacts associated with the project, including those associated with the Transportation Terminal that is the subject of this application. As part of this review process Telkwa Mining Ltd. has developed a SEMP which outlines the mitigation strategies to address potential community and environmental impacts, the monitoring of mitigation effectiveness, and the process to address impacts during the operation of the mine and the proposed Transportation Terminal. The SEMP also outlines the requirements for Telkwa Mining Ltd. to engage with First Nations, the public, and local governments.

The RDBN has attached a summary of the SEMP document with a focus on the proposed mitigations for noise, vibration, dust, aesthetics, and environmental contamination associated with the Transportation Terminal. The SEMP document is available from staff on request.

Dust Management

Dust Management is discussed in Section 6.3.2 of the Air Quality Management Plan (AQMP) prepared as part of the EA process. The plan states that most dust and other air quality emissions will be generated from vehicle use of the TAC, service, and haul roads within the Project Area. The primary mitigation measure for dust will be the use of watering systems and chemical agents to limit the generation of this dust during the Project's Construction, Operation, and Decommissioning and Reclamation phases. Dust binding agents will be added to the clean coal conveyor belt at the mine site to reduce dust during the hauling, stockpiling and rail car loading process. All haul trucks will be equipped with an automatic tarp system covering the top of the truck to reduce fugitive coal dust emissions. A secondary system to limit dust can be installed at the rail load out facility to dispense water in summer and chemical agents in winter, if determined necessary by Telkwa Mining Ltd..

Water Management

A sedimentation pond is proposed to be located as shown on the Transportation Terminal site development plan. The pond is designed to allow the settlement of suspended materials in the water. Water quality will be monitored at the discharge point. The settlement pond will be sized to convey the 200-year peak flows from the site. The pond is immediately downstream of the stockpile area and discharges into Bulkley River via an existing surface channel.

Vibration and Noise Management

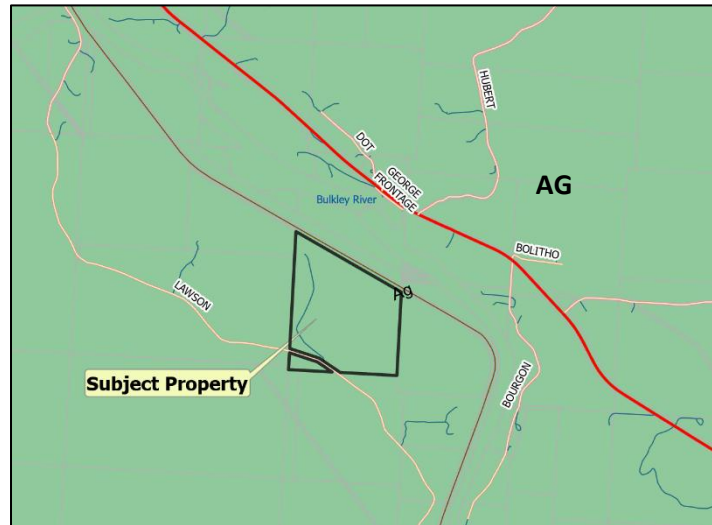
The applicant indicates that train noise will be reduced because of train speeds on the loop being less than 5 kilometres per hour. Also, vibration is not expected to be detectable above current baseline conditions. The applicant indicates that train whistles are not required for trains entering or leaving the loop.

OFFICIAL COMMUNITY PLAN (OCP), ZONING, AND THE AGRICULTURAL LAND RESERVE (ALR)

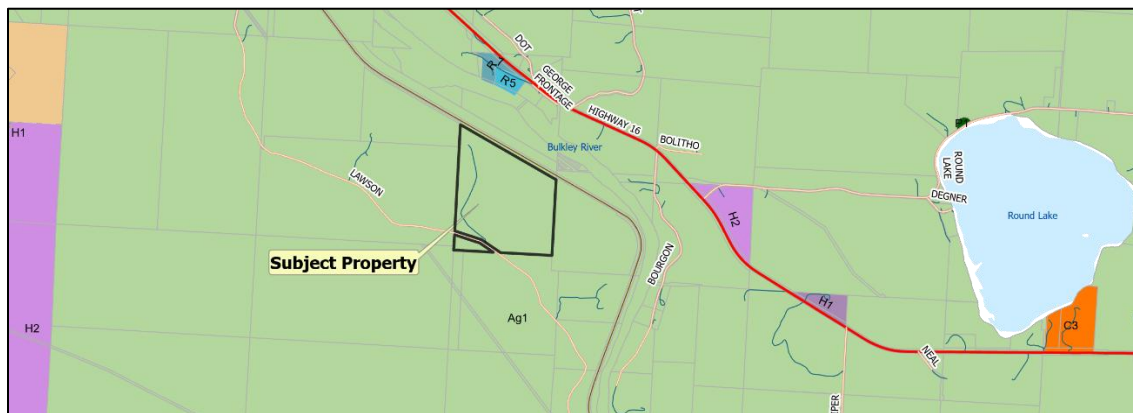
The current Agriculture (AG) OCP designation and Agricultural (Ag1) Zoning reflect that the land is in the ALR and is intended to be used for agricultural purposes. The applicant has also made application to the Agricultural Land Commission (ALC) to allow the Transportation Terminal use to occur as a non-farm use in the ALR. These applications are being processed concurrently. It

is noted that bylaws amending the OCP or Zoning Bylaw to allow the Transportation Terminal use should not be finalized without first obtaining non-farm use approval from the ALC.

OCP Map



Zoning Map



The OCP provides the following direction relating to this application

An Industrial Designation and rezoning application to allow industrial uses may be only be considered under the following circumstances.

- (a) *The proposed use is:*
 - (i) *necessary at or near the location of harvesting or extraction of an agricultural crop, mineral, or soil including gravel;*

- (ii) *a large scale industrial operation that is not appropriately located in an incorporated area; or*
 - (iii) *is a small scale light industrial activity.*
- (b) *The proposed industrial use will not create an amount of traffic, noise or other impact that will adversely affect the rural character of the area.*
- (c) *The proposed industrial use will not have an unacceptable negative impact on the environment.*
- (d) *The proposed industrial use will not have an unacceptable negative impact on neighbouring land uses.*
- (e) *Traffic management issues will be considered and addressed appropriately.*
- (f) *And, a proposed industrial use, that could lead to environmental impact in the event of flooding, is not located in a floodplain.*

The establishment of permanent greenbelt buffers, or other screening method along parcel boundaries to provide a physical separation between industrial uses of land and adjacent land uses shall be considered as part of any application review process.

Clean-up and restoration of areas negatively affected by past and existing industrial uses will be encouraged.

Rezoning applications for industrial uses that will have an unacceptable impact on the environment, adjacent land use, or the community as a whole, shall not be supported.

The Light Industrial Zone allows a Transportation Terminal as a principal use. This use is defined as follows.

Transportation Terminal means the use of land, Building or other Structure for a break-of-bulk or assembly point for commodities which enter or leave a Parcel by rail, common carrier trucking lines or freight forwarders, and may include one or more of the following incidental and subordinate uses:

- *Warehousing & storage;*
- *repair of related vehicles and equipment;*
- *storage of shipping and cargo containers, trailers and rail cars.*

In staff's opinion the proposed facility for the storage and shipping of coal by rail fits within the Transportation Terminal definition.

REFERRALS

This application is being referred to the Electoral Area A Advisory Planning Commission, Northern Health, the Village of Telkwa, the Town of Smithers, and the Ministry of Transportation and Transit for comment.

ATTACHMENT

Application Documents

SEEMP summary



February 2, 2021

Jason Llewellyn
Director of Planning
Regional District of Bulkley Nechako (RDBN)
37-3rd Ave
PO Box 820
Burns Lake, BC, V0J 1E0

SUBJECT: RAIL INFRASTRUCTURE REZONING OF PROPERTY LOT (A) DISTRICT LOT 1143 RANGE 5 COAST DISTRICT PLAN 1056 EXCEPT PLAN 9828

Dear Mr. Llewellyn:

Telkwa Coal Limited (TCL) has submitted a Non-Farm Use application to the Agriculture Land Commission (ALC) for the temporary use of private and Crown land parcels within the Agricultural Land Reserve (ALR) for the Tenas Project (the Project). The approval of that Application will allow for the construction of the Rail Infrastructure and the Tenas Access Corridor, which runs between the CN rail line and the Project's Coal Processing Plant. A copy of the Non-Farm Use Application has been submitted to RDBN as part of the Non-Farm Use application review process.

Based on our previous discussions, the land use rezoning process can be completed concurrently with the Non-Farm Use application review and the rezoning decision can be issued after the approval of the Non-Farm Use application by the ALC. Also based on our discussions, the property where the Rail Infrastructure is located is the only area that requires rezoning while the private lands overlapped by the Tenas Access Corridor do not require rezoning.

In support of the rezoning process for the property identified as Property Lot(A) District Lot 1143 Range 5 Coast District Plan 1056 except Plan 9828 within the Regional District of Bulkley Nechako (RDBN), TCL is providing additional information on the Rail Infrastructure development. TCL has enclosed the Application for Amendment to a Plan, Bylaw, Permit, or Floodplain Exemption for your review in Appendix I.

Rail Infrastructure Overview

Based on the Definitive Feasibility Study and discussions with CN Rail, a loop design was selected to accommodate 116 car unit trains. There will be three locomotives supplied by CN Rail, which will have a capacity of approximately 12,250 tonnes.

Figure 1 below provides the construction design for the Rail Infrastructure on the private property. The property address is 14544 Lawson Road, with a legal description of Lot (A) District Lot 1143 Range 5 Coast District Plan 1056 Except Plan 9828. Please see the attached land title provided in Appendix II. TCL has a binding agreement with the owners to purchase this property in first half of 2021.

The proposed Rail Infrastructure contains a rail loop that has a total length of 2.13 kilometers with a 0.34 km rail spur to connect the loop to CN Rail's main track.

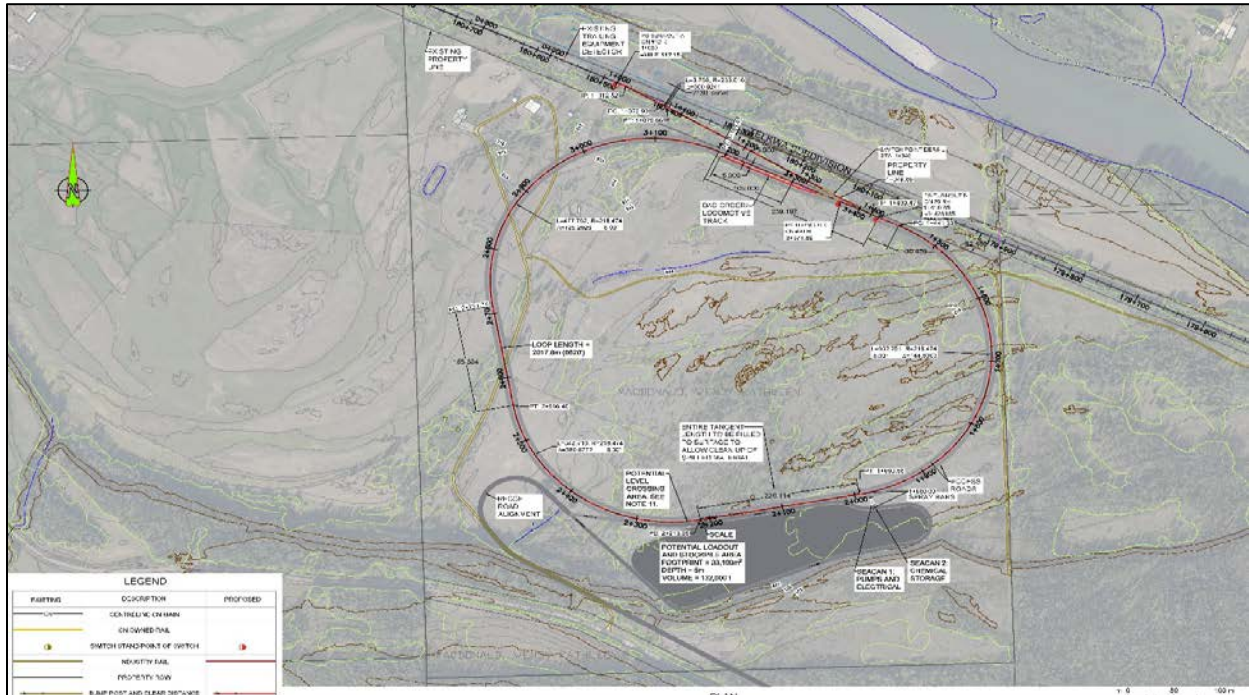


Figure 1: Rail Infrastructure

Several key design aspects for the loop include:

- Maximum rail curve of 8.0%,
- Maximum grade of less than 0.30%,
- Installation of a dedicated set of signals on the main CN rail line for efficient main track operation. CN Rail will be able to bring opposing trains just clear of the loop entrance rather than standing back at the existing block limits,
- Loading area of at least 175 meters to allow for efficient front-end loader operations,
- Dedicated Stockpile and Truck unloading area for B double trucks adjacent to the loading area,
- Sea containers for housing spray and possible agent systems for top of rail cars, side release and stockpile dust mitigation if required, and
- Located on TCL's private land.

Materials required for the construction of the Rail Infrastructure must comply with the CN Rail Engineering Specifications for Industrial Track. Their respective quantities are:

- All loop and connecting tracks are 115# RE bolted rail on #1 hardwood ties with premium fasteners on curves and standard fasteners on straight sections
- Lead track 341 meters (m)
- Curve track 1,373 m
- Tangent track 761 m

- Double point derail 1 unit
- #12-main track turnout 1 unit
- #10-yard turnout 2 units
- Bump post 1 unit
- Signal 1 unit
- Topsoil(average of 7.5 cm) 14,835 m³
- Cut 34,000 m³ of existing material on the property
- Fill 22,000 m³ of cut material produced above
- Ballast 4,500 m³ of approved rock
- Sub ballast 6,500 m³ of approved rock
- Culverts 20m x 900 mm diameter corrugated steel pipe
- Track Scale 1 unit
- Rail Topper 1 unit, 1 spray bar
- Side Car Release 1 unit, 2 spray bars, one for the train and one for trucks

Rail Infrastructure Operations

Road B-Double coal trucks transporting processed coal from the Coal Processing Plant will side tip the processed coal onto the stockpile pad at the Rail Infrastructure. Front end loaders will be used to stack the processed coal into two 15,000 tonne stockpiles. Each truck will have an approximate payload of 60 tonnes. The current anticipated truck configuration is illustrated by Figure 2 below.



Figure 2: Typical B-Double Truck Used for Transporting Processed Coal

Based on an anticipated production of 775,000 to 825,000 tonnes per annum, between 12,900 and 13,750 trucks per annum will be required. Approximately 1.6 trucks per hour will deliver coal to the Rail Infrastructure, for a total of 3 to 5 trucks an hour travelling along the Tenas Access Corridor, loaded and empty.

As mentioned, the two open stockpiles will have a combined capacity of 30,000 tonnes, which is equivalent to roughly 2.5 trains. Based on an average rail car capacity of 105.5 tonnes per car and

the production requirements, 63 to 68 trains per annum are required. This is approximately 1.25 trains per week. Front end loaders will be used to rehandle the processed coal from stockpile into rail cars, as illustrated by Figure 3 below.



Figure 3: Front-End Loaders Loading Rail Cars

Rail cars will be weighed using a weigh scale system to enable accurate loading of each train car. Each rail car will be dosed with a dilute dust binder agent to seal the coal and reduce fugitive dust emissions from the top of the train cars as they travel from the Rail Infrastructure to the port at Prince Rupert. During the winter months, anti-freeze will be applied to the empty train rail cars prior to filling with coal to ensure the coal does not freeze or stick to the rail cars when unloading at the port.

TCL is planning to operate 365 days a year and 24 hours a day. Stockpile handling is planned for 12 hours a day on dayshift if possible, however stockpile handling could also occur at night depending on operational requirements. Train loading will occur either for one 12-hour shift during the week or over a period of 72-hour period during the week. Train loading is expected to occur during the dayshift but could take place during the nightshift depending on operational requirements.

Rail Infrastructure Train Operations

Arriving Train

- CN Rail will operate the empty train to the loop.
- At Mile 112.15 Telkwa Subdivision, the train will enter the Loop-Lead Track. Maximum speed on the rail loop is 15 miles per hour.
- A Derail switch is located on the lead approximately 1,150' from the main track switch. The switch to the loop entry "B" is approximately 1,350' from the main track switch. The loop

track has a set-out spur with a clear distance of 344 feet for bad order cars or locomotive storage. Its switch “C” is lined normal for the loop.

- CN Rail power will be used to power the train during the loading process.
- The CN Rail train will enter the loop in a clockwise direction.
- When the train’s tail end car clears the loop-lead switch “B”, the locomotives will have circled the loop and be at the clearance point of switch “B”.
- The tail end of the train will be in full view of the train crew as illustrated by Figure 4 below.
- The CN Rail crew will line switch “B” for the loop, secure the derail switch and then pull the train around to the crossing at the loadout for hand-over to the TCL crew or to secure the train.
- If a TCL train crew is available, they will take over the train immediately on arrival at the crew change-over point, after completing a personal transfer with the CN Rail crew.
- If a TCL train crew is not available, the CN Rail crew will leave the train secured as required by their written procedures.

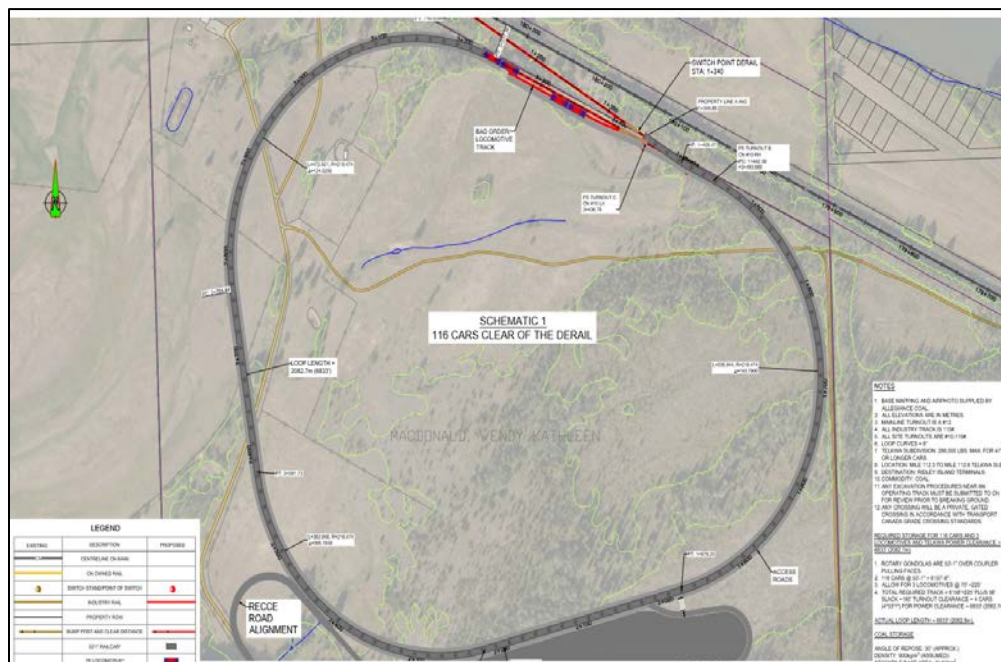


Figure 4: Typical Rail Car Set Up Prior to Loading of the Train Beginning

Loading the Train

- TCL loadout crews will load the rail cars using front-end loaders when the train is positioned, and a signal given.
- When they have completed the loading, and require a new spot, they will advise the train crew.

- Once all loading equipment and personnel are clear, the train will be moved forward (clockwise), using established radio communication procedures. Simultaneously, the loaded cars will be weighed.
- Any car that requires load adjustment will be addressed as soon as the train stops, and the OK is given by the train crew. Loading of the next block will commence.
- This procedure will be repeated until the entire train has been loaded.
- The entire train will be pulled around the loop and over the scale one more time to determine final weights and to apply topping agent.
- During winter conditions the train cars will be sprayed with antifreeze agent prior to loading to prevent coal from freezing to the side of the coal cars.

Departing Train

- After ensuring that the train is loaded, the TCL train crew will cut off the locomotives and then re-couple them to the last car of the train.
- This is a change of locomotive operating ends.
- They will complete locomotive brake and electrical tests, relocate the sensing brake unit to the now trailing end and complete a brake test and release any hand brakes applied.
- The train is now ready for movement in the reverse direction and the CN Rail crew will direct the train to exit the loop.
- If a CN Rail crew is not available, the TCL crew will leave the train secure as required by CN Rail written procedures.
- Once the CN Rail crew has taken charge of the train, and after performing all necessary checks and tests and securing operating authorities, they will reverse Switch “B” and the Derail switch.
- After departing, CN Rail will leave Switch “B” and the Derail switch lined for the next arriving CN Rail train.
- If TCL power and/or cars remain in the loop, Switch “B” and the Derail switch will be restored to normal.

Rail Infrastructure Power Requirements

The preliminary load lists indicate a power demand of 25kW for the Rail Infrastructure and facilities when construction is completed in 2022. The power supply for this infrastructure will come from the existing 600-volt single phase system on the west side of the Bulkley River. In 2023, lights will be added at the Rail Infrastructure to improve visibility of the stockpiles and train loading area. Table 1 below summarizes the expected power requirements for the Rail Infrastructure.

Table 1: Staged Power Requirements for the Rail Infrastructure

Area	Demand Power Current	Demand Power Year 1	Demand Power Years 2 onwards
Rail Infrastructure Power (kW), (sea container spray systems, and lights)	0	25	50



Rail Infrastructure's Water Use and Supply

Raw or Process Water Use and Supply

An existing groundwater well at the Rail Infrastructure will provide extra water required for the rail car agent topping agent system, rail car side release system, and the dust management system. Approximately 12,000 to 24,000 m³ of water per annum will be required, with more use in the summer months.

Potable Water Use and Supply

An existing system is in place at the Rail Infrastructure, which provides potable water from an established groundwater well. The well will have sufficient capacity for both potable water and raw water requirements at the Rail Infrastructure.

Sewage / Black / Grey Water Treatment

There is an existing septic system at the Rail Infrastructure which will be utilized for sewage treatment. TCL believes this system will be sufficient for the number of planned personnel at this location.

Rail Infrastructure Dust Management Plans

A dust binder solution will be applied to the filled rail cars to seal the top layer of coal and reduce fugitive dust emissions during the journey from the Mine to the port. Dust binding agent will be delivered to site by road tanker and stored in a fibreglass reinforced plastic (FRP) tote with a 1,000 L storage capacity. The tank will be heated and insulated to prevent freezing during the winter months.

Agents will be added at the plant's clean coal conveyor belt to reduce fugitive dust from truck loading, haulage, unloading, stockpile handling, and loading of processed coal by front end loaders into the rail cars. All trucks will be equipped with an automatic tarp system covering the top of the truck to reduce fugitive coal dust emissions.

A secondary system to limit dust can be installed at the Rail Infrastructure. It consists of sprayers that dispense water in summer and chemical agents in winter, if monitoring indicates that dust levels are elevated above the limits provided in the Environmental Management Permits.

TCL will adopt an adaptive management approach to dust management at the Rail Infrastructure. Results from monitoring will provide feedback to procedures and processes, which will help achieve outcomes specified in regulatory approvals.

During the colder months, an anti-freeze solution will be applied to the empty rail cars prior to filling to prevent coal freezing and sticking to the rail car during unloading at the port. The anti-freeze agent will be delivered to the Minesite by road tanker and will be stored in an FRP tank with a 40,000L storage capacity. The tank will be heated and insulated as the solution can become difficult to pump at below zero temperatures. The Rail Infrastructure rail car dosing system will have dosing pumps and equipment supplied within a self-contained and heated 40 ft container. The system is fitted with an air compressor to clear and purge the dosing lines and spray bars after the last rail car is filled.

Rail Infrastructure Water Management Plan

Total suspended sediments will settle in the Rail Infrastructure Sedimentation Pond by gravity during extended retention and/or the addition of flocculent. Total suspended solids will meet provincial guidelines for this type of pond. Water quality will be managed at the discharge point.

Flocculent addition is a contingency measure and has been included in the design. The Rail Infrastructure Sedimentation Pond was designed to have a low-level outlet to provide the required attenuation to settle a 10-micron particle. The emergency spillway for this pond was designed in accordance with CDA (2013). The Rail Infrastructure Pond was sized to convey the 200-year peak flow. These design elements are specified by provincial guidance.

Spillways were conservatively sized, assuming no attenuation of peak flows given the size of the pond, with an additional freeboard of 1 m above the spillway invert.

Table 2 below lists expected design parameters for the Rail Infrastructure Sedimentation Pond.

Table 2: Design Parameters for the Rail Infrastructure Sedimentation Pond

Parameter	Rail Infrastructure Sedimentation Pond
Dam crest elevation	523 m
Crest Width	5 m
Upstream side slope	2H:1V
Downstream side slope	3H:1V
Spillway invert	522 m
Pond volume below spillway invert	1773 m
Pond Depth	1.00 m
Peak outflow from low level outlet	7.90 L/sec
Required retention time to settle a 10-micron particle	13.9 hrs
Designed Pond Retention time	63 hrs

Rail Infrastructure Water Discharge

The Rail Infrastructure Sedimentation Pond is immediately downstream of the stockpile area and discharges into Bulkley River via an existing surface channel.

TCL plans to discharge from the Rail Infrastructure Sedimentation Pond during open water conditions for a given year. After the stockpile area and Rail Infrastructure have been reclaimed and the TSS water quality objectives are met for a period time, the Rail Infrastructure Sedimentation Pond will be decommissioned in final closure.

Rail Infrastructure Noise and Vibration Management

Train operations at the Rail Infrastructure will be strictly managed to ensure all train travel on the loop is less than 3 miles per hour or 5 kilometers per hour. The low rate of speed will be required to allow for efficient car loading, agent spraying operations and vibration reduction. Vibration is not expected to be detectable above current baseline conditions.



The Rail Infrastructure will not require train whistles to operate, which will limit noise. By utilizing a low-speed train movement, noise due to train movement will be significantly reduced. Noise emissions due to the Rail Infrastructure are not expected to be above the current baseline conditions. A full Environmental Assessment will be completed as part the British Columbia *Environmental Assessment Act*. This information will be provided to the RDBN in the Environmental Assessment application.

TCL will use an adaptive management approach to noise and vibration management at the Rail Infrastructure. Results from monitoring will provide feedback to procedures and processes which will help achieve outcomes specified in regulatory approvals.

Rail Infrastructure's Existing Buildings and Services

The Rail Infrastructure area has a home with a garage, large shop, water wells, septic field, two small storage sheds, and active low voltage powerlines. A portion of the property outside of the rail loop and coal stockpile are currently used for agriculture. TCL is planning to keep these structures intact, if possible, during construction and operations. TCL is planning to sub lease the agricultural area if there is interest. TCL will re-purpose the house as an office for Rail Infrastructure operations. The barn will be used as storage for small support equipment and light vehicles. The existing water wells will be used for potable water and raw water for dust mitigation. The septic field will be used for sanitary needs of the office. The low voltage powerlines will initially be used to power the site. TCL understands there might be approvals required from the building inspector to change from the current use to those proposed above. The following Table 3 summarizes the existing buildings on property where the Rail Infrastructure is located.

Table 3: Summary of Buildings on Property for Rail Infrastructure

Property	Building	Use	Size (meters)	Approximate Date Constructed
Lot A (See DF18988) District Lot 1143 Range 5 Coast District Plan 1056 Except Plan 9828 (Wendy and Donald MacDonald)	House	Main house	230	1973, with significant renovation in 1993
	Shop	Main shop with lean-tos on side	260	1997
	Greenhouse	Personal greenhouse, not commercial	9	2003
	Garden storage shed	Shed to store mowers and other equipment	18	2003
	Storage Barn	Storage shed designed to look like a small barn	10	2003
	Woodshed	Shed for firewood and other storage	24	1973
	Old Shop	Original shop on the property	30	1973

Table 4 below provides a summary of existing services for the private parcels that are crossed by the Tenas Access Corridor. Please note the proposed development does not require any services as it is an access road.

Table 4: Summary of services on the Property for Rail Infrastructure

Property	Road Access	Water Supply	Sewage Disposal	Hydro and Telephone	School Bus Service
Lot A (See DF18988) District Lot 1143 Range 5 Coast District Plan 1056 Except Plan 9828 (Wendy and Donald MacDonald)	Currently Existing	Currently Existing	Currently Existing	Currently Existing	Currently Existing

Rail Infrastructure's Geotechnical Aspects

As part of the Rail Infrastructure design, a geotechnical investigation was completed by Westrek. A copy of their report is included with this application in Appendix III.

The investigation included the excavation of several test pits and one 30-foot-deep sonic hole. No geotechnical concerns were identified; however, proper field preparation activities and careful loading of the ground needs to be carried out during the operations phase.

Rail Infrastructure's Anticipated Approvals and Monitoring

Currently, the expected list of approvals required for the Tenas Access Corridor are:

- Re-zoning requirements from the RDBN
- Environmental Assessment Certificate,
- Industrial Railroad Operating Permit, and
- Approval by the Agricultural Land Commission of a Non-Farm Use to temporarily move this land out of the Agricultural Land Reserve.

As part of the Environmental Assessment Regulatory Process, it is expected conditions will be included for the monitoring of dust, water, and noise in terms of:

- Monitoring Locations,
- Monitoring Frequency, and
- Monitoring requirements such as constituents to monitor, tests to conduct and etcetera.

This information will be provided to the RDBN when it becomes available and the link will be provided to the RDBN to assess all monitoring results from the Project.

If you have questions, please do not hesitate to contact me either by email or phone.

Sincerely yours,



Daniel J. Farmer, P.Eng.
COO, Allegiance Coal Limited / Telkwa Coal Limited

CC: Angela Waterman, File



Appendix I: Application for Amendment to a Plan, Bylaw, Permit, or Floodplain Exemption



General Information Requirements

- Copy of the Certificate of Title dated within 30 days of the date of the application.
Attached to Application Form under Appendix A.
- Letter of Authorization signed by all registered property owners if the agent is not the owner.
Attached to Application Form under Appendix B.
- Application fee cheque for \$1,500 for a combined OCP and Zoning Bylaw Amendment and \$100 for signage.
Cheque enclosed with Application fee for application in the amount of \$1,600.
- Completed and signed application form, Contaminated Sites Regulation Questionnaire
The signed application form is attached.
- Site plan drawn to a scale showing the following:
 - boundaries and dimensions of parcel,
 - size and location of all existing and proposed buildings, structures, and uses on the site including measurements from all proposed and existing structures to the nearest parcel line,
 - location and name of road(s) adjacent to the property,
 - existing and proposed parking and driveways,
 - topographic features, water bodies and waterways including measurements from all proposed and existing structures to the natural boundary, stream centre line or top of bank, whichever is applicable,
 - proposed subdivision layout, showing the number and approximate location of lots **(NOT APPLICABLE)**,
 - and/or consolidation of the parcel(s) **(NOT APPLICABLE)**, and
 - north arrow and scale

Site plans for each property have been included with a hatched area of proposed development for the Rail Infrastructure. These have been designated Map 1 for the private land parcel summarized as follows:

- *MAP 1 = Lot (A) District Lot 1143 Range 5 Coast District Plan 1056 Except Plan 9828(Wendy and Donald MacDonald).*

The Telkwa Coal private parcels were not included as they are already zoned for coal mining. Map 1 has been included in Appendix C attached to the application.

**TENAS METALLURGICAL COAL PROJECT
SOCIO-ECONOMIC MANAGEMENT PLAN (VERSION 3 – APRIL 2025)
RDBN SUMMARY (OCTOBER 17, 2025)**

This document is a staff summary of the SEMP as it relates to the mitigation of potential effects from the rail infrastructure to assist in the evaluation OCP Amendment and Rezoning Application RZ A-01-21 for the Transportation Terminal at 14544 Lawson Road.

The SEMP prepared by Telkwa Mining is 326 pages, is highly repetitive, and is organised in a manner which is challenging to navigate. Therefore, staff have distilled the draft SEMP into the following summary document which highlights the content of the plan as it relates to the impact of the Transportation Terminal proposed in support of the proposed metallurgical coal mine (Tenas Project) southwest of the Village of Telkwa.

The SEMP is proposed to be used by Telkwa Mining Limited (TML) to mitigate potential effects on the socio-economic conditions of employees, their families, and residents of the Regional Study Area. The SEMP provides a summary of potential effects, proposed mitigations, and monitoring that will be carried out to verify the magnitude, duration, and frequency of these effects with triggers provided to initiate an adaptive management process. The SEMP also outlines the requirements for Telkwa Mining to engage with First Nations, the public, and local governments.

NOISE

The SEMP highlights the following specific actions to mitigate the impact of noise at the proposed Transportation Terminal.

- Purchase and install noise monitoring equipment in the proximity of the Rail Infrastructure.
- Implement 1-800 phone line for public and government agencies to report complaints, issue escalation, ask questions, and request information.
- Implement website reporting and engagement portal.
- Purchase new mine mobile equipment if available, and if used mine mobile equipment is purchased ensure full documented mechanical inspections are performed prior to arrival at the Project.
- All engine replacements will comply the latest Canadian required Tier compliance for the diesel engine employed.
- Ensure vehicles are equipped with anti-idling information and equipment to allow equipment to be turned off.
- Maximize progressive reclamation and effectiveness of progressive reclamation, and plant screening vegetation at Rail Infrastructure.
- Ensure vans and busses are used for personnel transport by the Project and contractors.
- Provide incentives to employees to carpool and establish parking areas outside of Telkwa and at the Rail Infrastructure from where all employees and contractors will be transported

by van/bus to the Minesite. This will help to further reduce traffic on the roads and associated noise, particulate matter, and GHG emissions.

- Implement visual indication devices for backing up vehicles versus auditory devices, and minimize situations where vehicles are required to backup.

The following table highlights the proposed monitoring for noise, the trigger for an adaptive management response, and the adaptive management process to follow.

MONITORING FREQUENCY	MONITORING DATA	EXCEEDANCE TRIGGERS	FOLLOW UP MITGATIONS
Noise monitoring in proximity of Rail Infrastructure,	Instantaneous A-weighted decibel (dBA) readings, hourly averages, daytime averages, nighttime averages, weekly and monthly averages at continuous noise monitoring stations Number of employees carpooling daily Number of van and bus trips daily Number of trains daily and loading time for trains	Monitoring results reach 90% of EAC predicted values of 42.1 dBA daytime and 24.1 dBA nighttime for residence closest to the Rail Infrastructure	Review mitigations and investigate unit operation having largest contribution to noise emissions to ensure all mitigations are being followed. Then monitor the effect of these mitigations to determine if noise emissions are being positively affected to determine if additional corrective actions are required. Depending on contributing activity, put in place additional mitigations such as: installation of noise barriers at the Rail Infrastructure, reducing equipment speeds, adding mufflers to equipment, reduction of idling of equipment, or implementing electric vehicles. Then monitor the effect of these mitigations to determine if noise emissions are being positively affected to determine if additional corrective actions are required.
		Complaints on noise from the public, employees, or contractors: Level 1 = between 2 and 4 unique instances per month Level 2 = between 5 and 8 unique instances per month Level 3 = >8 unique instances per month	Engage with individual that lodged the complaint and investigate what happened, what were actual levels based on monitoring, determine if there were any exceedances of EAC predicted values or provincial guidelines, if applicable. Identify any follow up mitigations, commensurate with the number and type of complaint, that will be implemented to assist with complaints. Ensure individual is involved with review of draft report for any input and comments. Put in place a follow up program to see if issue continues. Report on complaint and mitigations and monitoring results to the individual and via Telkwa Mining's website.

DUST

The SEMP highlights the following specific actions to mitigate the impact of dust at the proposed Transportation Terminal.

- Purchase and install dust monitoring equipment at Rail Infrastructure.
- Implement 1-800 phone line for public and government agencies.
- Implement website reporting and engagement portal.
- Purchase and install systems to reduce drop heights for all conveyors and ensure adequate spares are in the warehouse for these systems.
- Purchase automatic tarping systems for all processed coal haulers and ensure there are sufficient spare tarps and parts for system in warehouse.
- Maximize progressive reclamation and effectiveness of progressive reclamation, and plant screening vegetation at Rail Infrastructure.
- Ensure all non-coal stockpiles are temporarily vegetated when not in use and that cleared areas are kept to a minimum to reduce dust.
- Ensure vans and busses are used for personnel transport.
- Provide incentives to employees to carpool.
- Establish parking areas outside of Telkwa and at the Rail Infrastructure from where all employees and contractors will be transported by van/bus to the Minesite.

The following table highlights the proposed monitoring for dust, the trigger for an adaptive management response, and the adaptive management process to follow.

MONITORING FREQUENCY	MONITORING DATA	EXCEEDANCE TRIGGERS	FOLLOW UP MITGATIONS
Continuous PM10 and PM2.5 monitoring in proximity to Rail Infrastructure, Dustfall monitoring will be completed quarterly in proximity to Rail Infrastructure	PM10/PM2.5 readings, hourly averages, daytime averages, nighttime averages, weekly and monthly averages at continuous dust monitoring locations 30 to 90 day average dustfall levels at periodic station locations of Rail Infrastructure O CO2, CH4, SO2, and NO2 readings may be taken as well Number of trains daily	Monitoring results reach 90% of EAC predicted values of 25.4 ug/m3 in 24-hours for PM10 and 12.1 ug/m3 in 24-hours for PM2.5 at Rail Infrastructure (see Table 6.2.2, Section 13.0-Chapter 2 Air Quality Management Plan)	Review mitigations and investigate unit operation having largest contribution to particulate emissions to be sure all mitigations are being followed. Depending on contributing activity, put in place additional mitigations such as adding additional chemical agents and/or water for dust suppression to coal stockpiles, non-coal stockpiles, and road and pad surfaces, or increasing the frequency of road and stockpile watering and/or agent addition. Then monitor the effect of these mitigations to determine if particulate emissions are being positively affected to determine if additional corrective actions are required. Additional corrective actions include installation of dry fog systems to loading areas at the Rail Infrastructure, or addition of sprinkler systems for coal stockpiles at the Rail Infrastructure, or construction of wind fences at the Rail Infrastructure or construction of buildings to fully enclose stockpiles.

		Complaints on air quality from the public, employees, or contractors: Level 1 = between 2 and 4 unique instances per month Level 2 = between 5 and 8 unique instances per month Level 3 = >8 unique instances per month	Engage with individual that lodged the complaint and investigate what happened, what were actual levels based on monitoring, determine if there were any exceedances of EAC predicted values or provincial guidelines, if applicable. Identify any follow up mitigations, commensurate with the number and type of complaint, that will be implemented to assist with complaints. Ensure individual is involved with review of draft report for any input and comments. Put in place a follow up program to see if issue continues. Report on complaint and mitigations and monitoring results to the individual and via Telkwa Mining's website.
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It is noted that there is no exceedance trigger for dust levels at the rail infrastructure monitoring station identified in the SEMP. Telkwa Mining representatives have indicated that "TML will adopt the 24-hour BC provincial guidelines for pm10 and pm2.5 at the monitoring station at a public receptor near rail infrastructure to activate the trigger action response plan. We will also update SEMP during permitting to reflect this change. RDBN will also be provided access to the data as well."

AESTHETICS

The SEMP highlights the following specific actions to mitigate the visual impact on the proposed Transportation Terminal.

- Limit Project Footprint and Project Area at the Rail Infrastructure by clustering project components,
- Align linear Project features into common right-of-ways, minimize the length of haul roads, access roads and rail line where possible. Use or improve existing roads where practical.
- Utilize a loop design configuration for the rail that requires half the space and subsequent footprint of other western Canadian coal mines.
- Implement 1-800 phone line for public and government agencies.
- Implement website reporting and engagement portal.
- Implement temporary reclamation measures of non-coal stockpiles.
- Maximize progressive reclamation, and plant screening vegetation at Rail Infrastructure.
- Select tonal values and low chroma colours to paint buildings and related infrastructure to create low contrast to existing background conditions throughout the spring, summer, and fall months when viewers are more likely to be outdoors.
- Select tonal values best suited for the dominant building face when seen from the priority viewpoints.
- Select non-reflective building and infrastructure surfaces to eliminate glare from reflected sunlight.
- Manage light effects using best management practices (BMPs) and engineering design.

- For areas visible to the public from sensitive viewpoints investigate eliminating night lighting of buildings and structures and block light from windows where possible considering safety requirements.
- Direct lighting shall be directed towards the ground and have appropriate covers to avoid fugitive light emissions.
- Lighting should be sensitive to environmental conditions and automatically shut off during daylight hours.

The following table highlights the proposed monitoring for visual impacts, the trigger for an adaptive management response, and the adaptive management process to follow.

MONITORING FREQUENCY	MONITORING DATA	EXCEEDANCE TRIGGERS	FOLLOW UP MITGATIONS
Annually	Conduct annual review of VRMP and update as necessary. Pictures of Project from same sites where simulations were developed		Plant additional vegetation screening around buildings, and stockpiles. Adopt changes based on engagement activities with Indigenous groups and the public if possible.
		Complaints about reduction in visual quality during the active phases by public, employee, or contractor: Level 1 = between 3 and 4 unique instances per month Level 2 = between 5 and 7 unique instances per month Level 3 = >8 unique instances per month	Engage with individual that lodged the complaint and investigate what happened, what were actual levels based on monitoring, determine if there were any exceedances of EAC predicted values or provincial guidelines, if applicable. Identify any follow up mitigations, commensurate with the number and type of complaint, that will be implemented to assist with complaints. Ensure individual is involved with review of draft report for any input and comments. Put in place a follow up program to see if issue continues. Report on complaint and mitigations and monitoring results to the individual and via Telkwa Mining's website.

VIBRATION

The SEMP highlights the following specific actions to mitigate vibration at the proposed Transportation Terminal.

- Purchase and install monitoring equipment at Rail Infrastructure within 75 metre (m) of active rail car loading.
- Implement 1-800 phone line for public and government agencies.
- Implement website reporting and engagement portal.

- Purchase and install systems to reduce drop heights for all conveyors and ensure adequate spares are in the warehouse.

The following table highlights the proposed monitoring for vibration, the trigger for an adaptive management response, and the adaptive management process to follow.

MONITORING FREQUENCY	MONITORING DATA	EXCEEDANCE TRIGGERS	FOLLOW UP MITGATIONS
Rail Infrastructure vibration monitoring will be monitored quarterly but will aim to target when trains are being loaded.	Peak Particle Velocity (PPV) at Rail Infrastructure Number of trains loaded daily Loading time of trains	Exceed BC Peak Particle Velocity (PPV) provincial guideline of 5.0 mm/second at 75 m from boundary of mine permit or Rail Infrastructure rail tracks recorded by monitoring devices	Review mitigations and investigate unit operation having largest contribution to vibration emissions. Depending on contributing activity, put in place additional mitigation such as ... reducing of equipment speeds, or reducing the loading heights at the Rail Infrastructure ... or reducing the speed of trains at the Rail Infrastructure or vehicles that come near residential receptors such as PPR2. Then monitor the effect of these mitigations to determine if vibration emissions are being positively affected to determine if additional corrective actions are required.
		Complaints about vibration from the public, employees, or contractors: Level 1 = <2 unique instance per month Level 2 = 3 unique instances per month Level 3 = >4 unique instances per month	Engage with individual that lodged the complaint and investigate what happened, what were actual levels based on monitoring, determine if there were any exceedances of EAC predicted values or provincial guidelines, if applicable. Identify any follow up mitigations, commensurate with the number and type of complaint, that will be implemented to assist with complaints. Ensure individual is involved with review of draft report for any input and comments. Put in place a follow up program to see if issue continues. Report on complaint and mitigations and monitoring results to the individual and via Telkwa Mining's website.

METAL AND CHEMICAL ENVIRONMENTAL CONTAMINATION

The SEMP highlights the following specific actions to mitigate metal and chemical contamination at the proposed Transportation Terminal.

- Implement water, sediment, vegetation, soil and aquatic life monitoring programs.
- Implement water management plans.
- Maximize progressive reclamation, and plant screening vegetation at Rail Infrastructure and MIC and along the portion of the TAC beside BC Hydro's 500 kV powerline;
- Ensure all stockpiles are temporarily vegetated when not in use and that cleared areas are kept to a minimum to reduce dust;
- Ensure vans and busses are used for personnel transport;
- Provide incentives to employees to carpool;
- Implement temporary reclamation measures of stockpiles;
- Minimize Project Area and Footprint;
- Ensure water management systems are installed and operating as planned for the Project.

- Participate on local initiatives and groups related to human health.

The following table highlights the proposed monitoring for environmental contamination, the trigger for an adaptive management response, and the adaptive management process to follow.

MONITORING FREQUENCY	MONITORING DATA	EXCEEDANCE TRIGGERS	FOLLOW UP MITIGATIONS
There will be the full water monitoring network of surface and groundwater stations that will be monitored on at least a monthly basis plus all sedimentation, control, and management ponds that will be monitored on a weekly basis when discharging. Locations of soil, vegetation, and wildlife sampling locations will correspond to baseline plots that will be sampled every year to 5 years to be compared to baseline.	Monthly for water samples Annually for soils, vegetation, wildlife Parameter concentrations in vegetation within the Project Area, in market foods from Smithers and Houston grocery suppliers, in soils, and in water and sediment	Parameter concentrations in environmental media within the Project Area approaching 90% of BC Guidelines for the Protection for the Aquatic Life	Review mitigation and investigate the unit operation having the largest contribution to water quality parameter of concern to be sure all mitigations and best management practices are being followed. .
		Parameter concentrations in environmental media (water, vegetation) within the Project Area are equal to or greater than BC Guidelines for the Protection of Aquatic Life Parameter concentrations in market foods are above levels predicted in the EAC	Review mitigation and investigate the unit operation having the largest contribution to water quality parameter of concern to be sure all mitigations and best management practices are being followed.
		Complaints about reduced human health from the public, employees, or contractors: Level 1 = <2 unique instance per month Level 2 = 3 unique instances per month Level 3 = >4 unique instances per month	Engage with individual that lodged the complaint and investigate what happened, what were actual levels based on monitoring, determine if there were any exceedances of EAC predicted values or provincial guidelines, if applicable. Identify any follow up mitigations, commensurate with the number and type of complaint, that will be implemented to assist with complaints. Ensure individual is involved with review of draft report for any input and comments. Put in place a follow up program to see if issue continues. Report on complaint and mitigations and monitoring results to the individual and via Telkwa Mining's website

PUBLIC ENGAGEMENT, MONITORING AND REPORTING

Telkwa Mining Ltd. intend to send out mail notification that the project has been approved to enter the construction, and operation phases to all Telkwa, Smithers, Houston, Witset, New Hazelton, Burns Lake, and Electoral Areas G and A residents through Canada Post. They will take out advertisements in the local paper, the Bulkley Browser for one month, and radio for two weeks. They will also put up notices in the local post offices, schools, municipal hall notice boards, business notice boards, Telkwa Mining office notice boards. They will also erect minesite signage and hold open house and neighbours meetings at the initiation of the project. Indigenous groups including the Office of the Wet'suwet'en, Witset First Nation, Wet'suwet'en First Nation and Skin Tyee First Nation will be notified in accordance with the detailed consultation protocols identified in the SEMP.

It is noted that there are no protocols for engagement with local government, as there are for First Nations. The Community Engagement Program is described as involving regular and ongoing engagement with stakeholder groups (including local governments). The Community Engagement Programs are proposed to include the following components.

- open-door policy at all company offices
- general engagement meetings and presentations
- company website
- social media
- project tours
- toll-free phone line
- emails
- participation at community and industry events
- individual and neighbours' group meetings
- Project Access Committee
- Project Advisory Committee
- BC EAO website
- Sponsorship
- SEMP reports;
- general engagement meetings and presentations
- brochures and fact sheets
- Collaborative Governance Steering Committee
- Mine Advisory Committee;

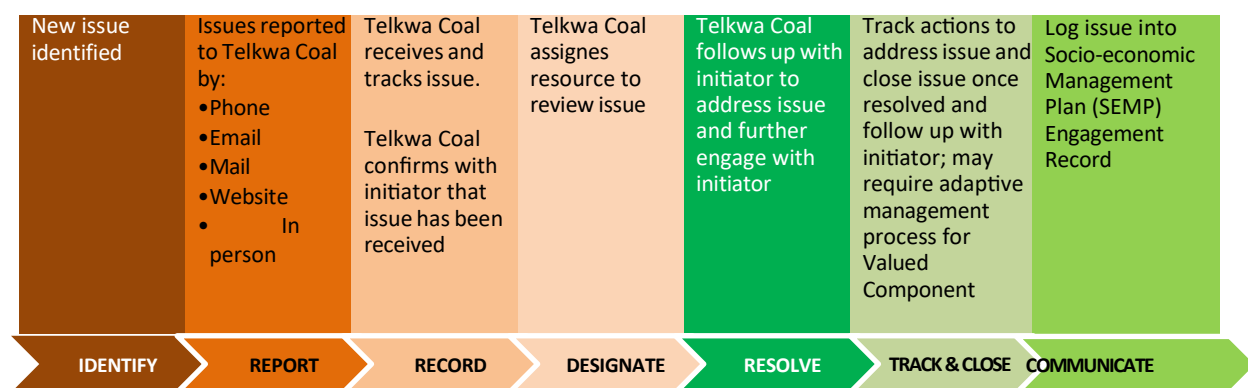
The SEMP is largely silent regarding the requirement to report on monitoring data and complaints to local government and the public, and there does not appear to be a requirement to obtain local government input when developing the annual report. The SEMP states that compliance reporting will be subject to the Environmental Assessment Certificate and permit conditions and will be summarized with information from other management plans into an Annual Environmental Management Summary Report, and the Annual Environmental Reports as required.

The SEMP report will also provide an update on the effectiveness of mitigation measures for identified socio-economic effects, and any adaptive management changes in response to new or evolving issues.

A representative from Telkwa Mining has indicated that “In the next version (for permitting) of the SEMP, TML will include:

- TML will offer RDBN an opportunity to review and provide comments on the SEMP report before it is submitted to the Province.

The SEMP states that they will “manage SEMP concerns through dialogue to ensure they are identified and addressed. Local governments, provincial agencies, and Indigenous groups are encouraged to contact Telkwa Mining if a concern is identified related to the Project SEMP development and implementation. Issues can be identified directly by telephone, email, or mail to the identified Telkwa Mining SEMP representative.”



Telkwa Mining indicates that they will amend the SEMP as required based on annual evaluations, monitoring, and feedback from stakeholders and Indigenous groups. Changing any part of the SEMP requires the use of a formalized in accordance with the Management of Change Procedure in the EMS.