

June 5, 2020

Coastal GasLink Pipeline Ltd.  
450 - 1st Street SW  
Calgary, AB T2P 5H1

Attention: Coastal GasLink Pipeline Ltd.

**RE: Amendment to Application Determination Number 100106968**

**Permit Holder:** Coastal GasLink Pipeline Ltd.  
**Amendment Date of Issuance:** June 5, 2020  
**Amendment Effective Date:** June 5, 2020  
**Application Submission Date:** April 30, 2020  
**Amendment Application Number:** 100110634  
**Approved Disturbance Footprint:** 0.0 ha

**AMENDMENT DETAILS**

<b>Changes In and About a Stream:</b> 0005975	To add instream works authorization
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**GENERAL AUTHORIZATIONS AND CONDITIONS**

**Water Sustainability Act**

1. The Commission, pursuant to section 11 of the *Water Sustainability Act*, authorizes the Changes In and About a Stream, as detailed in the Activities Approved table above, within the activity area for construction and maintenance activities, unless otherwise restricted by this authorization:
  - a. Instream works must be carried out in accordance with the methods and any mitigations, as specified in the application

**CONDITIONS**

**Clearing/Forest Act**

2. The permit holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the activity area that are considered to be a safety hazard according to Workers Compensation Act regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the activity area without causing damage to standing timber may be harvested.

**Water Course Crossings and Works**

3. Stream, lake and wetland crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.
4. In-stream activities within a fish bearing stream, lake or wetland must occur:
  - a. during the applicable reduced risk work windows as specified in the Skeena Region - Reduced Risk Work Windows;

- b. in accordance with alternative timing and associated mitigation recommended by a Qualified Professional and accepted by the Commission; or
  - c. in accordance with an authorization or letter of advice from Fisheries and Oceans Canada that is provided to the Commission.
5. At any time, the Commission may suspend instream works authorized under this permit. Suspensions on instream works will remain in place until such time as the Commission notifies permit holders that works may resume. Reasons for suspension of works may include, but are not limited to, drought conditions and increased environmental or public safety risks.
6. Equipment used for activities under this Permit must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity.
7. Mechanical stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:
- a. To facilitate construction of a crossing, a machine is permitted to ford the stream a maximum of one time in each direction at the crossing location.
  - b. Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings;
  - c. The permit holder must ensure that permanent bridges are designed and fabricated in compliance with:
    - i. the Canadian Standards Association Canadian Bridge Design Code, CAN/CSA-S6; and
    - ii. soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.
  - d. Except with leave of the Commission, the permit holder must ensure that
    - i. culverts are designed and fabricated in compliance with the applicable:
      - a. Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or
      - b. Canadian Standards Association Standard CSA B1800, Section B182.2, Plastic Non-pressure Pipe Compendium; or
    - ii. any pipe installed in lieu of a culvert is of at least equivalent standard and strength as any culvert as specified above.
  - e. Except with leave of the Commission, the permit holder must ensure that bridges or culverts meet the criteria set out in i., ii. or iii. below:
    - i. the bridge or culvert is designed to pass the highest peak flow of the stream that can reasonably be expected within the return periods set out in Column 2 of the table below for the period the permit holder anticipates the structure will remain on site, as set out in Column 1 of the table below:

Anticipated period crossing structure will remain on site	Peak flow period
Bridge or culvert, 3 years or less	10 years
Bridge other than a bridge within a community watershed, more than 3 years but less than 15	50 years
Bridge within a community watershed, more than 3 years	100 years
Bridge, 15 years or more	100 years
Culvert, more than 3 years	100 years

- ii. the bridge, or any component of the bridge:
  - a. is designed to pass expected flows during the period the bridge is anticipated to remain on the site;
  - b. is constructed, installed and used only in a period of low flow; and
  - c. is removed before any period of high flow begins.
- iii. the culvert;
  - a. is a temporary installation, and the permit holder does not expect to subsequently install a replacement culvert at that location;

- b. is not installed in a stream, when the stream contains fish;
  - c. is sufficient to pass flows that occur during the period the culvert remains on the site;
  - d. is installed during a period of low flow; and
  - e. is removed before any period of high flow begins.
- f. Snow fills must consist of clean snow and may only be located on streams that are dry or frozen to the bottom during the period of construction, maintenance and use. Where periodic thaws are anticipated, the permit holder must ensure measures are in place that allows meltwater to pass through, ensure movement of fish is not impeded, and prevent pooling on the upstream side of the snow fill. Snow fill and any installed culverts must be removed prior to spring snow melt;
- g. Ice bridges on fish bearing streams may only be constructed where sufficient water depth and stream flows prevent the bridge structure from coming in contact with the stream bottom;
- h. Water applied to construct an ice bridge on a water body must be sourced in accordance with the *Water Sustainability Act* unless
- i. the water body is a stream with a stream channel width of at least 5 meters and is not designated as a sensitive stream under the *Fish Protection Act*, or has a riparian class of W1, W3, or L1;
  - ii. the water is sourced from the same water body proximal to the location on which the ice bridge is constructed;
  - iii. the water body is not within the boundaries of a public park;
  - iv. pump intakes do not disturb beds of streams or wetlands and are screened with a maximum mesh size and approach velocity in accordance with the Fisheries and Oceans Canada Freshwater Intake End-of-Pipe Fish Screen Guideline, and
    - a. where the water body is a stream, the flow of water in the stream at the time and location of pumping exceeds 60 litres per second and the instantaneous pumping rate does not exceed 1% of the water flowing in the water body at the time and location the pumping occurs, or
    - b. where the water body is a lake or pond, the cumulative volume of water withdrawn does not exceed 10 cm of lake or pond depth, calculated as the product of lake or pond surface area x 10 cm;
  - v. records of water withdrawal and corresponding streamflow measurements are maintained by the permit holder and provided to the Commission upon request.
- i. Bridge or culvert abutments, footings and associated scour protection must be located outside the natural stream channel and must not constrict the channel width.
- j. Wetland crossings must be constructed, maintained and removed in accordance with the following:
- i. organic cover within and adjacent to the wetland must be retained;
  - ii. minimize erosion or release of sediment within the wetland;
  - iii. any padding materials must be placed on the wetland surface only and must not be used for infilling;
  - iv. any padding materials must be removed as soon as practicable following construction, considering weather and ground conditions; and
  - v. the wetland, including banks and bed, must be restored, to the extent practicable, to the condition that existed before the crossing was initiated.
8. Log fill stream crossings must be must be planned and conducted in accordance with the following requirements:

- a. log fill crossings are authorized to be used in streams with a riparian classification of S6 or NCD only;
- b. must not occur unless the stream is frozen to its bed or is completely dry;
- c. a separation layer of clean snow or geotextile must be placed in the stream prior to installation of log bundles;
- d. the crossing does not impede melt water from periodic thaws;
- e. log fills must be removed prior to spring snow melt; and
- f. logs must be free from dirt and debris.

## **ADVISORY GUIDANCE**

1. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the Oil and Gas Activities Act.

All pages included in this permit and any attached documents form an integral part of this permit.



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Justin Anderson  
Authorized Signatory  
Commission Delegated Decision Maker

Copied to:

Land Agent – CWL Energy Management Ltd.

April 24, 2019

Coastal GasLink Pipeline Ltd.  
450 - 1st Street SW  
Calgary, AB. T2P 5H1

Attention: Coastal GasLink Pipeline Ltd.

**RE: Determination of Application Area Number 100106968**

**Permit Holder:** Coastal GasLink Pipeline Ltd.  
**Date of Issuance:** April 24, 2019  
**Effective Date:** April 24, 2019  
**Application Submitted Date:** December 6, 2018  
**Application Determination Number:** 100106968  
**Approved Disturbance Footprint:** 7.557 ha  
**Mine Permit #:** G-11-158  
**Mine #:** 1642054

**ACTIVITIES APPROVED**

<b>Associated Oil &amp; Gas Activity No.:</b> 00192033, 00192035, 00192036	<b>Type:</b> Access
<b>Associated Oil &amp; Gas Activity No.:</b> 00192034	<b>Type:</b> Aggregate/Borrow Pit

**GENERAL AUTHORIZATIONS and CONDITIONS**

**AUTHORIZATIONS**

**Land Act**

1. The BC Oil and Gas Commission (the "Commission") pursuant to section 39 of the *Land Act* hereby authorizes the Permit Holder referenced above to construct and operate a related activity(s) as detailed in, Activities Approved table above and the Activity Details table(s) below, when applicable, for the purposes of carrying out oil and gas activities as defined in the *Oil and Gas Activities Act* (OGAA); subject to the conditions set out herein.
2. The authorizations granted under this permit are limited to the area identified in the spatial data submitted to the Commission in the permit application as identified and dated above; herein after referred to as the 'activity area'.
3. The Commission, pursuant to section 39 of the *Land Act*, hereby authorizes the occupation and use of any Crown land located within the activity area.
  - a) A licence authorized under section 39 of the *Land Act* for the Crown land portion of this application will follow. The Permit Holder is subject to the conditions contained in the Licence.
  - b) The authorization to occupy and use Crown land under the Licence expires two years from the date of issuance, unless the Commission has received notice of construction start, or this permit is otherwise extended, suspended, cancelled, surrendered or declared spent.

- c) The authorization to occupy and use Crown land does not entitle the Permit Holder to exclusive possession of the activity area.
- d) The total disturbance within the activity area must not exceed the total approved disturbance footprint as referenced above.

### Forest Act

4. The Commission, pursuant to section 47.4 of the *Forest Act*, hereby authorizes the removal of Crown timber from the activity area under the cutting permits associated with the Master Licence(s) as follows:

**Master Licence to Cut No.:** M02617

**Cutting Permit No.:** 12

**Timber Mark No.:** MTC736

**Total New Cut:** 7.55 ha.

**Forest District:** (DKM) Coast Mountains Natural Resource District

**Region:** Coastal

5. The cutting permits are deemed spent upon the submission of the post-construction plan or upon either the cancellation or expiry of the activities approved under the permit.

## CONDITIONS

### Notification

6. A notice of construction start must be submitted, as per the relevant Commission process at the time of submission, at least 48 hours prior to the commencement of activities under this permit.
7. Within 60 days of the completion of construction activities under this permit, the Permit Holder must submit to the Commission a post-construction plan as a shapefile and PDF plan accurately identifying the location of the total area actually disturbed under this permit. The shapefile and plan must be submitted via eSubmission.
8. At least 5 (five) working days prior to the commencement of construction, the Permit Holder must provide a notice of works to any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the works are to occur.
9. Any notifications required to be sent to the Chief Inspector of Mines or Inspector of Mines under Mines Permit G-11-158 for Mine No: 1642054 must also be sent to the Commission at [OGC.ExternalNotifications@bcogc.ca](mailto:OGC.ExternalNotifications@bcogc.ca).

### Environmental

10. The Permit holder must implement the activities specified in the Mine Plan [Mine Plan for Construction of an Aggregate Quarry A29.9A; Unit 3, Block C, Group 103-I-8, prepared by Coastal GasLink Pipeline Project, Project No. CGL4703-CH2M-ENV-PLN-004. Dated: November 28, 2018] and as indicated in Mine Permit # G-11-158 during the operation, closure and reclamation of the mine as applicable.
11. Aggregate operations associated with this authorization are considered a mining activity under the Mines Act. A Mines Act permit issued by the Ministry of Energy, Mines and Petroleum Resources is required prior to construction.

### Clearing

12. The Permit Holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the activity area that are considered to be a safety hazard according to *Workers Compensation Act* regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the activity area without causing damage to standing timber may be harvested.
13. The holder of the cutting permit must pay to the government, stumpage and any waste billing determined in accordance with the terms of this authorization.
14. The authorized cutting permit does not grant the Permit Holder the exclusive right to harvest Crown timber from the activity area. Authority to harvest some or all of the timber may be granted to other persons. The

Permit Holder's right to harvest timber applies to any timber found on the site at the time they undertake harvesting activities.

15. All harvested Crown timber must be marked with the cutting permit's associated timber mark.
16. Stumpage for cutting permits falling within the Coast Area, as defined in the Coast Appraisal Manual (the "Manual") will be calculated in accordance with the Manual (volume based).
17. Any waste assessments applied under the Master Licence to Cut are subject to the merchantability specifications and monetary waste billing requirements in the Provincial Logging Residue and Waste Manual specific to the region associated with the cutting permit authorization.

### Archaeology

18. An AIA report must be submitted to the Commission as soon as practicable.
19. If artifacts, features, materials or things protected under section 13(2) of the Heritage Conservation Act are identified the permit holder must, unless the permit holder holds a permit under section 12 of the Heritage Conservation Act issued by the Commission in respect of that artifact, feature, material or thing:
  - a. immediately cease all work in the vicinity of the artifacts, features, materials or things;
  - b. immediately notify the Commission and the Archaeology Branch of the Ministry of Forests, Lands and Natural Resource Operations and Rural Development;
  - c. refrain from resuming work in the vicinity of the artifacts, features, materials or things except in accordance with an appropriate mitigation plan that has been prepared in accordance with the Heritage Conservation Act and approved by the Archaeology Branch of the Ministry of Forests, Lands and Natural Resource Operations and Rural Development.

### ADVISORY GUIDANCE

1. Construction Plan 3111-21424 is for the Permit Holder's internal reference only and was not reviewed as a decision tool for this permit, nor does it form an integral part of this permit.
2. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the *Oil and Gas Activities Act*.
3. Appropriate tenure will be issued upon acceptance of the post-construction plan. Submission of the original application and submission of the post-construction plan is considered an application for all subsequent applicable *Land Act* tenures. Upon the Commission's acceptance of the post-construction plan no further applications for replacement tenure are required.
4. As per the Health, Safety and Reclamation Code for Mines in British Columbia, all Mines plans, including programs for reclamation and closure, must be updated at a minimum of 5 years upon commencement of activity.
5. The Commission recommends a document summarizing how reclamation of the borrow pit will be undertaken and shared with any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the works are to occur and prior to commencement of reclamation activities.
- 6.

All pages included in this permit and any attached documents form an integral part of this permit.



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Dan G. Hanson  
Authorized Signatory

Permit Holder: Coastal GasLink Pipeline Ltd.  
Application Determination number: 100106968

Application Submission Date: December 6, 2018  
Date Issued: April 24, 2019

Commission Delegated Decision Maker

Copied to:

Land Agent – Roy Northern Land Service Ltd.  
First Nations – Haisla Nation Council, Kitselas First Nation (Traditional Territory)  
Ministry of Forests District Office – (DKM) Coast Mountains Natural Resource District



**PROVINCE OF BRITISH COLUMBIA  
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES**

**SAND AND GRAVEL PERMIT  
APPROVING WORK SYSTEM AND RECLAMATION PROGRAM**  
(Issued pursuant to Section 10 of the **Mines Act** R.S.B.C. 1996, C.293)

Permit Number: **G-11-158**

Mine Number: **1642054**  
Approval Number: **19-1642050-0306**

Permittee: **Coastal GasLink Pipeline Ltd.**  
**450 - 1st Street SW**  
**Calgary, AB T2P 5H1**

For work located at the following property:

**Borrow Site A29.9A**  
Lat: 54.25000N Long: -128.27917W

This authorization approves mining activities as described in Mine Plan (dated November 28, 2018 Rev. 0 and submitted with the application) beginning April 24, 2019 and ending prior to December 31, 2021.

This approval and permit is subject to the appended conditions.

Date of Issuance: **Wednesday, April 24, 2019**



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**Dan G. Hanson**  
**Review Approval Resource Officer**  
**BC Oil and Gas Commission**

## PREAMBLE

Notice of intention to commence work on a sand and gravel pit, including a plan of the proposed work system and a program for the protection and reclamation of the surface of the land and watercourses affected by the Mine Plan dated November 28, 2018 and submitted with the application.

This permit contains the requirements of the Ministry of Energy and Mines for reclamation. It is also compatible, to the extent possible, with the requirements of other provincial ministries for reclamation issues. Nothing in this permit, however, limits the authority of other provincial ministries to set other conditions, or to act independently, under their respective permits and legislation.

## CONDITIONS

The Chief Inspector of Mines (Chief Inspector) hereby approves the work plan and the program for protection and reclamation of the land surface and watercourses subject to compliance with the following conditions:

1. Reclamation Security

The requirement for reclamation security as provided for in Part 10(4) of the *Mines Act* is waived, and in its place securities provided to the Oil and Gas Commission by the Permittee will be relied upon for the proper performance of the approved program, including completion of reclamation of the mine site and all the conditions of this permit, in a manner satisfactory to the Chief Inspector and in accordance with the standards described in section 10.7 of the Health, Safety and Reclamation Code for Mines in British Columbia.

2. Volume of Material

Total volume of material permitted to extract under this permit must not exceed 100,000 tonnes per year.

3. Land Use

The surface of the land must be reclaimed to the following land use: **Wildlife Habitat**

4. Productivity

The level of land productivity to be achieved on reclaimed areas must not be less than existed prior to mining on an average property basis unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, the impracticality of doing so.

5. Revegetation

Land must be re-vegetated to a self-sustaining state using appropriate plant species.

6. Use of Suitable Growth Medium

- a. On all lands to be revegetated, the growth medium must satisfy land use, productivity, and water quality objectives. Topsoil and overburden (to rooting depth) must be removed from operational areas prior to any disturbance of the land and stockpiled separately on the property for use in reclamation programs, unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, that reclamation objectives can otherwise be achieved.

- b. No topsoil must be removed from the property without the specific written permission of the Inspector of Mines.
7. Buffer Zones and Berms

Buffer zones and/or berms must be established between the mine and the property boundary unless exempted in writing by the Inspector of Mines.
8. Treatment of Structures and Equipment

Prior to abandonment, and unless the Chief Inspector has made a ruling otherwise, such as heritage project consideration or industrial use,

  - a. all machinery, equipment and building superstructures must be removed,
  - b. concrete foundations must be covered and revegetated unless, because of demonstrated impracticality, they have been exempted by the Inspector, and
  - c. all scrap material must be disposed of in a manner acceptable to the Inspector.
9. Watercourses
  - a. Impacts to watercourses are not authorized under this approval
  - b. Water which flows from disturbed areas must be collected and diverted into settling ponds.
10. Roads
  - a. All roads must be reclaimed in accordance with land use objectives unless permanent access is required to be maintained.
  - b. Individual roads will be exempted from the requirement for total reclamation under condition 10 (a) if either:
    - i. the Permittee can demonstrate that an agency of the Crown has explicitly accepted responsibility for the operation, maintenance and ultimate deactivation and abandonment of the road, or
    - ii. the Permittee can demonstrate that another private party has explicitly agreed to accept responsibility for the operation, maintenance and ultimate deactivation and abandonment of the road and has, in this regard, agreed to comply with all the terms and conditions, including bonding provisions, of this reclamation permit, and to comply with all other relevant provincial government (and federal government) regulatory requirements.
11. Disposal of Fuels and Toxic Chemicals

Fuels, chemicals or reagents which cannot be returned to the manufacturer/supplier are to be disposed of in compliance with municipal, regional, provincial and federal statutes.
12. Temporary Shutdown

If this sand and gravel pit ceases operation for a period longer than one year the Permittee must either continue to carry out the conditions of the permit or apply for an amendment setting out a revised program for approval by the Chief Inspector.

13. Safety Provisions

All safety and other provisions of the **Mines Act** must be complied with to the satisfaction of the Chief Inspector.

14. Monitoring

The Permittee must undertake monitoring programs, as required by the Inspector of Mines, to demonstrate that reclamation objectives are being achieved.

15. Alterations to the Program

Substantial changes to the program must be submitted to the Inspector of Mines for approval.

16. Notice of Closure

Pursuant to Part 10.6.1 of the Health, Safety and Reclamation Code for Mines in British Columbia, a Notice of Completion of Work must be filed with the Inspector of Mines not less than seven days prior to cessation of work.

17. Annual Report

- a. Annual reports must be submitted in a form and containing the information as and if required by the Inspector of Mines.

18. Site Stability

- a. The inspector must be advised in writing at the earliest opportunity of any unforeseen conditions that could adversely affect the extraction of materials, site stability, erosion control or the reclamation of the site.
- b. The stability of slopes must be maintained at all times and erosion must be controlled at all times.
- c. Mining activities on slopes with a terrain classification of IV or greater must have an engineered design prior to the commencement of these activities.
- d. The discovery of any significant subsurface flows of water, seeps, substantial amounts of fine textured, soils, silts and clays, must be reported to the inspector as soon as possible and work must cease until the inspector advises otherwise.

Training and Orientation

The manager must ensure that all workers are adequately trained to do their job or are working under the guidance of someone who has competency both in the job and in giving instruction, and ensure that all employees receive thorough orientation and basic instruction in safe work practices.

The manager must maintain a record of all training workers and supervisors have received, and make this record available to an inspector upon request.

19. Hazards and Confined Spaces

The Manager must ensure hazardous areas and confined spaces on the mine site are identified and documented in a formal report.

Confined spaces must be clearly marked near the entrances to the confined space. Upon completion of the report, the report must be provided to all emergency responders (police, fire, ambulance, etc.)

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that may potentially enter the mine site.

20. Guarding of Equipment:

Unless situated so as to prevent a person coming into accidental contact with it, every drive belt, chain, rope or pulley, sprocket, flywheel, geared wheel and every opening through which any belt, pulley or wheel operates, and every bolt, key, set screw and every part of any wheel or other revolving part that projects unevenly from the surface must be effectively enclosed, covered, or guarded.

21. Mine Emergency Response Plan (MERP):

An emergency response plan must be developed and implemented prior to commencement of exploration activities. In addition to addressing daily operational issues, the plan must specifically address emergency evacuation of personnel due to injury and forest fire hazard. All persons on the mine site must be familiar with the MERP. The plan must be available on site for review.

22. Access Control

The Manager must ensure, pursuant to section 1.3 of the Health, Safety and Reclamation Code for Mines in British Columbia, other than an inspector, only persons authorized by the manager must enter or be permitted to enter the mine site. This must be accomplished through the use of locked gates or other suitable means. In addition, notice to this effect must be posted at all road entrances to the mine.

23. Environmental Protection

- a. The Permittee must ensure an adequate erosion and sediment control plan is developed and implemented by a qualified person prior to commencement of approved activities. This plan must be updated by a qualified person, consistent with mining operations, throughout the life of the mine. This plan will be made available to an Inspector upon request.
- b. Silt laden water must be suitably contained on the mine site and not be allowed access to any watercourse or stream.
- c. Dust originating from the mine site must be controlled at the source to the satisfaction of the regional Inspector. Dust must not be allowed to impact adjacent private properties.
- d. All roads must be appropriately constructed and top dressed such that dust is controlled. A sprinkler system or water truck must be utilized to ensure dust control.
- e. Excessive noise must be controlled at the source. Adequate mufflers must be utilized on equipment to eliminate excessive noise.
- f. All activities on the mine site must be designed and conducted such that impacts to wildlife are eliminated or minimized.

24. Authorizations from Other Agencies:

The Permittee is responsible for obtaining all permits and authorizations as required from other government agencies and complying with terms and conditions as set out by those agencies.

25. Compliance:

All activities on the mine site must comply with terms and conditions listed in:

- a. the **Mines Act**,
- b. the *Health, Safety and Reclamation Code for Mines* in British Columbia, and

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c. the *Metal Leaching and Acid Rock Drainage Guidelines for Mines in British Columbia*

26. Fuels and Lubricants

Fuels and Lubricants, if stored on the mine site, must conform to the requirements of the *Field Guide to Fuel Handling, Transportation, and Storage*.

The Permittee must develop and implement a hydrocarbon management plan that deals with fueling, operational servicing, spill prevention and clean-up for fuels and lubricants stored on or off the mine site. The plan must, at a minimum, account for the following:

- a. Fuel and lubricants must be delivered to site as needed to re-supply and oil tanks on mobile and fixed equipment.
- b. Impermeable, oil absorbent matting must be used when refueling and servicing equipment.
- c. While refueling the operator must be in control of the refueling nozzle at all times.
- d. If any Petroleum, hydrocarbon or other product (no matter how small) is spilled the contaminated soil/gravels must be forthwith collected and removed for appropriate disposal.
- e. Fuel or oil leaks on equipment must be effectively repaired as soon as they are discovered or the equipment must be removed from the site and not operated until repairs have been made.
- f. An emergency spill containment and clean up kit must be maintained at the site while it is in operation. The kit must have the capacity to contain and clean up 100% of a spill from a failure of the largest volume of a fuel or lubricant tank or system plus 10%

27. Chance Find Plan

The Manager must develop and implement a suitable Archaeological Chance Find Procedure (CFP). The Manager must ensure all workers on the site are aware of and understand the CFP and adhere to the procedure.

28. Property Boundaries

A minimum of 5 meters (horizontal) buffer of undisturbed land must be maintained between property boundaries pursuant to part 10.5.8 of the Health, Safety and Reclamation Code for Mines in British Columbia.

29. Groundwater Table

The manager must ensure sand and gravel is not excavated below a depth 1.0 metre above the high ground water table. A minimum of 1.0 metre of sand and gravel must be maintained above the high ground water table.

30. Crushing Activities

The manager must ensure a seven day notification is provided to the Regional Inspector of Mines prior to initiating any crushing activities on the mine site.

31. Reclamation

- a. The Permittee must salvage and stockpile all available topsoil, overburden, and organic material including large woody debris in the disturbance footprint for use in reclamation.

- b. The Permittee must protect stockpiles from erosion, degradation, and contamination through re-vegetation and/or other practices.
- c. The Permittee must ensure that stockpiles are clearly marked to ensure that they are protected during construction and mine operations.
- d. Stripped and stockpiled soil suitable for use in reclamation must not be used as fill.
- e. Progressive reclamation must be conducted whenever practicable. Reclamation activities must include:
  - i. Re-contouring of disturbed areas to achieve surfaces to pre-disturbance shapes.
  - ii. Compact surfaces must be de-compacted to allow water infiltration and achieve self-staining vegetation.
  - iii. Soil Material salvages prior to the construction of the site must be replaced and must:
    - a) be rough and loose with abundant microsites to facilitate the lodging and germination of seeds;
    - b) be keyed into the underlying materials such that they do not slump off;
    - c) incorporate roots, stumps and other woody debris to reduce erosion and create greater biological diversity; and
    - d) be re-vegetated promptly.

The mine site must be returned to a forested state.

32. Receiving Foreign Materials

The Manager must not allow any foreign materials to be accepted or stored on the mine site including but not limited to garbage, refuse, concrete, asphalt, other soils unless authorized in writing by the regional Inspector.

33. Invasive Plants

The Permittee must prevent introduction of invasive plants to the disturbance footprint, including topsoil stockpiles, and control invasive plants that do establish on the site, including via monitoring to identify establishment of invasive species and reporting of outbreaks.