

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: **G-7-232**

Mine No.: **1610323**

Issued to: **Earl Wilder**
[REDACTED]
[REDACTED]

for work located at the following property:

Statlu Pit

This approval and permit is subject to the appended conditions.

Issued this 9th day of February in the year 2009.



Ed Taje

Senior Inspector of Mines, *for*
Douglas E Sweeney
Chief Inspector of Mines

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 Notice of Work dated August 19, 2008 was filed with the Inspector of Mines on August 19, 2008. Notice of such filing was published in Agassiz-Harrison Observer on October 29, 2008 and a Public Information Meeting was held on November 19, 2008.

This permit contains the requirements of the Ministry of Energy, Mines and Petroleum Resources for reclamation. It is also compatible, to the extent possible, with the requirements of other provincial ministries for reclamation issues. The amount of security required by this permit, and the manner in which this security may be applied, will also reflect the requirements of those ministries. 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.

Decisions made by staff of the Ministry of Energy, Mines and Petroleum Resources will be made in consultation with other ministries.

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
 - (a) The owner, agent or manager (herein called the Permittee) shall maintain with the Minister of Finance securities in the amount of fifty four thousand dollars (\$54,000.00). A letter of credit dated April 9, 2009 in the amount of ten thousand dollars (\$10,000.00) has been submitted, however, the balance of forty-four thousand dollars (\$44,000.00) shall be made available at the request of the Chief Inspector of Mines. The security will be held by the Minister of Finance for the proper performance of the approved program and all the conditions of this permit in a manner satisfactory to the Chief Inspector.

- (c) The Permittee shall conform to all Ministry of Environment approval, licence and permit conditions, as well as requirements under the **Wildlife Act**. Should the Permittee not conform to these conditions, then all or part of the security may be used to fulfill these requirements.

2. Land Use

The surface of the land and watercourses shall be reclaimed to the following land use: **reforestation**

3. Productivity

The level of land productivity to be achieved on reclaimed areas shall 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.

4. Revegetation

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

5. Use of Suitable Growth Medium

- (a) On all lands to be revegetated, the growth medium shall satisfy land use, productivity, and water quality objectives. Topsoil and overburden (to rooting depth) shall 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 shall be removed from the property without the specific written permission of the Inspector of Mines.

6. Buffer Zones and Berms

Buffer zones and/or berms shall be established between the mine and the property boundary unless exempted in writing by the Inspector of Mines.

7. 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 shall be removed,
- (b) concrete foundations shall be covered and revegetated unless, because of demonstrated impracticality, they have been exempted by the Inspector, and
- (c) all scrap material shall be disposed of in a manner acceptable to the Inspector.

8. Watercourses

- (a) Watercourses shall be reclaimed to a condition that ensures
 - (1) long-term water quality is maintained to a standard acceptable to the Chief Inspector,
 - (2) drainage is restored either to original watercourses or to new watercourses which will sustain themselves without maintenance, and
 - (3) use and productivity objectives are achieved and the level of productivity shall not be less than existed prior to mining unless the Permittee can provide evidence which demonstrates, to the satisfaction of the Chief Inspector, the impracticality of doing so.
- (b) Water which flows from disturbed areas shall be collected and diverted into settling ponds.

9. Roads

- (a) All roads shall 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 9(a) if either:
 - (1) 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
 - (2) 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.

10. Disposal of Fuels and Toxic Chemicals

Fuels, chemicals or reagents which cannot be returned to the manufacturer/supplier are to be disposed of as directed by the Chief Inspector in compliance with municipal, regional, provincial and federal statutes.

11. Temporary Shutdown

If this sand and gravel pit ceases operation for a period longer than one year the Permittee shall 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.

12. Safety Provisions

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

13. Monitoring

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

14. Alterations to the Program

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

15. 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 shall be filed with the Inspector of Mines not less than seven days prior to cessation of work.

16. Annual Report

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

17. Site Stability

- a) The inspector shall 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 the slopes shall be maintained at all times and erosion shall be controlled at all times.
- c) The discovery of any significant subsurface flows of water, seeps, substantial amounts of fine textured, soils, silts and clays, shall be reported to the inspector as soon as possible and work shall cease until the inspector advises otherwise.

OTHER CONDITIONS

- 18. Property boundaries shall be marked and maintained and pit boundaries shall be marked and maintained. All persons working on the property will be instructed as to the meanings of the markings.
- 19. Operator shall ensure that the proposed mining activities do not affect nesting birds, especially under Section 34 of the *Wildlife Act*. Typical species of interest would be Heron, Eagle, Peregrine Falcon, Spotted Owl and primary cavity nesters.

Sediment and Erosion Control

20. Sediment control and water management structures shall be constructed and operational prior to soil disturbance which has the potential to result in sediment release. This shall be monitored.
21. The Permittee shall initiate progressive reclamation where possible to control erosion around the mine area.
22. Sediment laden water resulting from excavation activities, including drainage, shall not be allowed free access to creeks or watercourses but shall be suitably contained and/or treated to produce a final effluent not exceeding 25mg/l total suspended solids prior to discharge.

Groundwater/Aquifer Protection

23. A minimum of 1 meters of gravel/sand shall be left in place above the high ground water table. This buffer will be maintained to prevent disruption of groundwater. The base elevation shall be established by a suitable Professional Registered in the Province of British Columbia
24. Land will be as far as practical contoured to match the adjacent topography and revegetated in accordance with the intended end land use

Fuel Handling/Spill Containment

25. Prior to commencing construction, the Permittee shall develop a Fuel Management and Spill Contingency Plan covering construction and mining activities. The plan shall be revised as appropriate and adhered to throughout the life of mine. The spill contingency plan shall be developed in accordance with the BC Guidelines for Industrial Emergency Response Contingency Plans (1992). This plan shall be maintained at the mine and be available to all supervisors and workers. All supervisors and workers shall be instructed in the provisions of this plan prior to the commencement of site development and operations and as may be necessary there after. The plan shall be forwarded to the Ministry of Energy, Mines and Petroleum Resources – Southwest Region Office.
26. Equipment shall be refueled at one designated site, using mobile tankage. Mobile equipment shall not be refueled or serviced within 50 metres of any watercourse. Oil spills shall be cleaned up immediately and the waste materials disposed of in

an appropriate manner. Absorbent pads and spill containment kits shall be maintained on-site during the course of operations.

27. All stationary engines shall be provided with suitably designed drip pans.
28. An emergency spill containment kit of adequate capacity shall be maintained on site whenever the mine is in operation.
29. The Permittee shall immediately contain and implement remedial measures for any spill of hydrocarbon or other deleterious substance at the mine site. Any such occurrence shall be reported to the District Inspector, and to the Provincial Emergency Program in accordance with the Spill Reporting Regulation of the Environment Management Act. Contaminated materials shall be disposed of in a manner acceptable to the Regional Waste Manger. Any spill of hydrocarbon product or other deleterious material in quantities that require reporting under Federal or Provincial regulation or statute, shall be considered a dangerous occurrence pursuant to Part 1.7.1 of the Code.
30. Suitable methods of dust control including water sprays shall be utilized to mitigate dust created from mining/processing operations including haulage on and from site.
31. Measures shall be taken to mitigate noise created as a result of processing of aggregate.

Hours of Operation

32. The Manager shall as schedule truck haulage to and from the pit such that gravel trucks are not in conflict with elementary school bus drop off and pick up points between the nearest residence to the pit along the transportation route and the intersection with the Loughheed Highway.

Others

33. Waste containers and garbage shall be removed from site weekly.
34. First aid equipment shall be maintained as appropriate for the number of people employed. The manager shall ensure a Emergency Transport Vehicle is on site at all times when work is undertaken within the foot print of the permit area.

35. Excavation work shall be suspended during periods of extreme fire hazard conditions. Fire fighting equipment shall be maintained at all drill sites in accordance with the Forest Fire Prevention and Suppression Regulation.
36. Unless modified by this permit all conditions of the Notice of work shall be considered integral components of this permit.
37. This permit allows for the extraction of pit run, crushing, and screening and washing.
38. A road use permit is required from the Ministry of Forests and the permittee is required to meet conditions within the road use permit to the satisfaction of the Ministry of forests.