

PROVINCE OF BRITISH COLUMBIA  
MINISTRY OF ENERGY AND MINES

**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-5-244**

Mine No.: **1630160**

Issued to: **N J Contracting**  
**6982 Rosen Lake Road**  
**Jaffray BC V0B 1T2**

for work located at the following property:

**N J Gravel Pit**

This approval and permit is subject to the appended conditions.

Issued this 31<sup>st</sup> day of August in the year 2004.

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F.W. Hermann, P. Eng.  
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 Tuesday, June 01, 2004 was filed with the District Inspector on Tuesday, June 01, 2004. Notice of such filing was published in on and in the Gazette on **FILL IN GAZETTE DATE**.

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. 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 and Mines 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 **s.17**  
**s.17** 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.
- (b) The Permittee shall conform to all forest tenure requirements of the Ministry of Forests. Should the Permittee not conform to these requirements then all or part of the security may be used to cover the costs of these requirements.
- (c) The Permittee shall conform to all Ministry of Water, Land & Air Protection 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: *Residential*

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 District Inspector.

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 District Inspector.

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 District Inspector, to demonstrate that reclamation objectives are being achieved.



14. Alterations to the Program

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

15. Notice of Closure

Pursuant to Part 10.5.1 of the Health, Safety and Reclamation Code for Mines in British Columbia, a Notice of Completion of Work shall be filed with the District Inspector 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 District Inspector.

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.

**SPECIAL CONDITIONS:**

- a) Permit authorizes gravel extraction, crushing, screening, stockpiling, loadout and reclamation activities.
- b) The operator shall obtain a road access agreement from the Ministry of Transportation.
- c) Pit access shall be gated
- d) All trees, vegetation and topsoil shall be removed within 2 metres of the rim of a working face. Timber debris shall not be buried or placed as pit backfill but shall be disposed of in an appropriate manner and at the earliest possible opportunity

- e) Topsoil shall not be removed from site and shall be stockpiled for pit reclamation purposes. Topsoil stockpiles shall be sloped at less than the angle of repose and shall be secured with an appropriate ground cover in the interests of erosion control.
- f) Working face shall not exceed 2 metres above the reach of the available mobile loading equipment
- g) Site shall not be used for any purpose unrelated to the development and extraction of the sand and gravel resource. Disused or damaged equipment shall not be stored on site and the pit shall not be used for the disposal of garbage, woodwaste, toxic materials or petroleum wastes
- h) All waste containers, wood debris, and garbage shall be removed from site at the earliest possible opportunity
- i) **First Aid** facilities shall be maintained in accordance with requirements of the **Mines Act** for the number of persons employed